

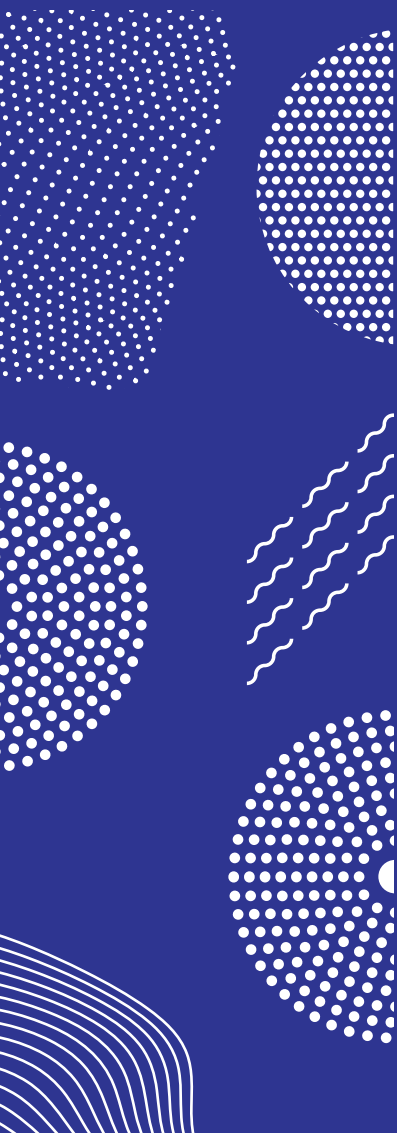


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NURMIJÄRVI GEOPHYSICAL OBSERVATORY: MAGNETIC RESULTS 2016

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**NURMIJÄRVI GEOPHYSICAL
OBSERVATORY**

MAGNETIC RESULTS 2016

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<p>Title</p> <p>Nurmijärvi Geophysical Observatory: Magnetic Results 2016</p>		
<p>Abstract</p> <p>The magnetic yearbook of the magnetic recordings at the Nurmijärvi observatory contains tables, figures of hourly, monthly, and yearly means of the magnetic field components X, Y and Z as well as magnetic activity indices (K, Ak) in 2016. Magnetic isolines describing the distribution of geomagnetic field components in Finland 2017.0 are shown by a series of maps.</p>		
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1 Introduction

This report presents magnetic measurements carried out at the Nurmijärvi (NUR) Geophysical Observatory between January 1 and December 31, 2016. The observatory is operated by the Finnish Meteorological Institute (FMI) and is part of the Observation Services Division of the institute. Information about the IMAGE magnetometer network is included in this report, as it is partly operated by the observatory. The Nurmijärvi Geophysical Observatory started recording the Earth's magnetic field in April 1952. The first yearbook was for 1953.

2 Description of the observatory

The observatory is located some 40 km NNW from Helsinki in the northern part of the Nurmijärvi municipality having over 41,000 inhabitants. The observatory lies on a moraine ridge by the lake Sääksjärvi. The 7 ha forest area of the observatory is limited to the lake in the North and North-East, to a nature reserve forest in the South and to a private forest in the West. There are no artificial disturbance sources nearby.

The coordinates of the observatory are:

	Lat.	Lon.
Geographical	60°30.5'N	24°39.3'E
Geomagnetic	57°43.8'	113°28.8'
Corr.geomagnetic	56°49.2'	102°31.2'

The magnetic coordinates are referred to the IGRF-95 model:

L-value	3.3
Height	105m

The Nurmijärvi observatory is running two three-component magnetometers, which are controlled usually once per week with absolute measurements. A proton magnetometer started recording in 2013. Another magnetic recording system at the observatory is the three-component pulsation magnetometer of the Sodankylä Geophysical Observatory. The Observation Services Division makes continuous airborne radioactivity recording and operates the automatic weather station observing following: temperature, humidity, snow depth, current weather, rain and clouds. University of Leicester operates the radio transmitter for ionospheric research. The receiver is in United Kingdom. The Geological Survey is observing soil temperature and humidity. The Finnish Environment Institute is observing water level in the lake Sääksjärvi.

The Nurmijärvi observatory has a magnetic calibration and test laboratory for magnetometer and sight compass calibrations and for compass swing base measurements at airfields. FINAS (Finnish Accreditation Services) accredited the laboratory as the number K050 on 17th of August 2007. The accreditation was renewed in 2011.

The quality system of the Observation Services Division was certified by Det Norske Veritas in March 2012.

3 Recording instruments

The Danish suspended flux gate magnetometer (FGE-89) is the primary instrument. The second magnetometer, the Ukrainian LEMI-025, was installed in March 2013

and operates in the variation house producing correct one-second data. The sensors are directed in geographic North and East directions measuring the X, Y and Z components. Since June 2013 a proton magnetometer (GSM-90) is also recording in the variation room. The temperature in the variometer room is kept at 18°C . Analog voltages from the FGE magnetometer are AD-converted in the variation room and the digital data are transferred through optical wires to the computers in the main observatory building. The digital data of the LEMI-025 and of the GSM-90 is transferred through wireless internet to the main observatory building.

The Linux based software stores the data in three files as one-second, ten-seconds and one-minute averages. Timing is based on GPS time shared through the local network. The standard one-minute values are averages over one minute periods starting and ending at a half minute (e.g. 59:30 - 00:30, 00:30 - 01:30, 01:30 - 02:30). The given time is the starting minute at the centre of the period (00, 01, 02 etc.).

4 Absolute measurements

The total field (F) was measured by the Polish PMP-7 proton precession magnetometer and declination and inclination with the DI-flux-magnetometer, which consists of a non-magnetic Zeiss-Jena theodolite (010B) and of a flux-gate element mounted on its telescope. The absolute measurements were made on average once a week. The baseline values as determined for the suspended FGE are shown in Fig. 3.

5 Data processing and dissemination

In the processing the final baseline values and sensitivities were used and hourly mean values were calculated. The measured baseline values were followed closer than half a nanoTesla. The 10-second and 1-minute digital data were visually inspected on the computer screen.

Tables showing the three-hour K-indices were computed from 10 s data using the 'FMI' algorithm. The upper limit for $K = 9$ is $750nT$.

Daily files of minute data were sent by e-mail to the INTERMAGNET system. In 2013 the 1-second data of the LEMI-025 magnetometer was started to send to the INTERMAGNET system. The final corrected minute values together with other required data were sent to the Paris server for the INTERMAGNET DVD 2016.

6 Secular results of IMAGE stations

The IMAGE magnetometer network (Fig. 2) consisted at the end of 2016 of 37 stations from Niemegk in Germany to Ny Ålesund on Svalbard. Until June 2016 the principal investigator of this international project was Eija Tanskanen at FMI, and from June 2016 onwards Liisa Juusola at FMI. At the end of 2016 twelve IMAGE stations were operated by FMI, ten in Finland (including Nurmijärvi), one in Estonia and one in northern Norway. Nurmijärvi, Oulujärvi and Ranua stations have LEMI-025 magnetometers providing correct one second data. At seven of the stations the service and absolute measurements were done in co-operation with the Sodankylä Geophysical Observatory of the Oulu University. The uncertainty of the annual mean values calculated for the IMAGE stations is estimated to be $\pm 5nT$.

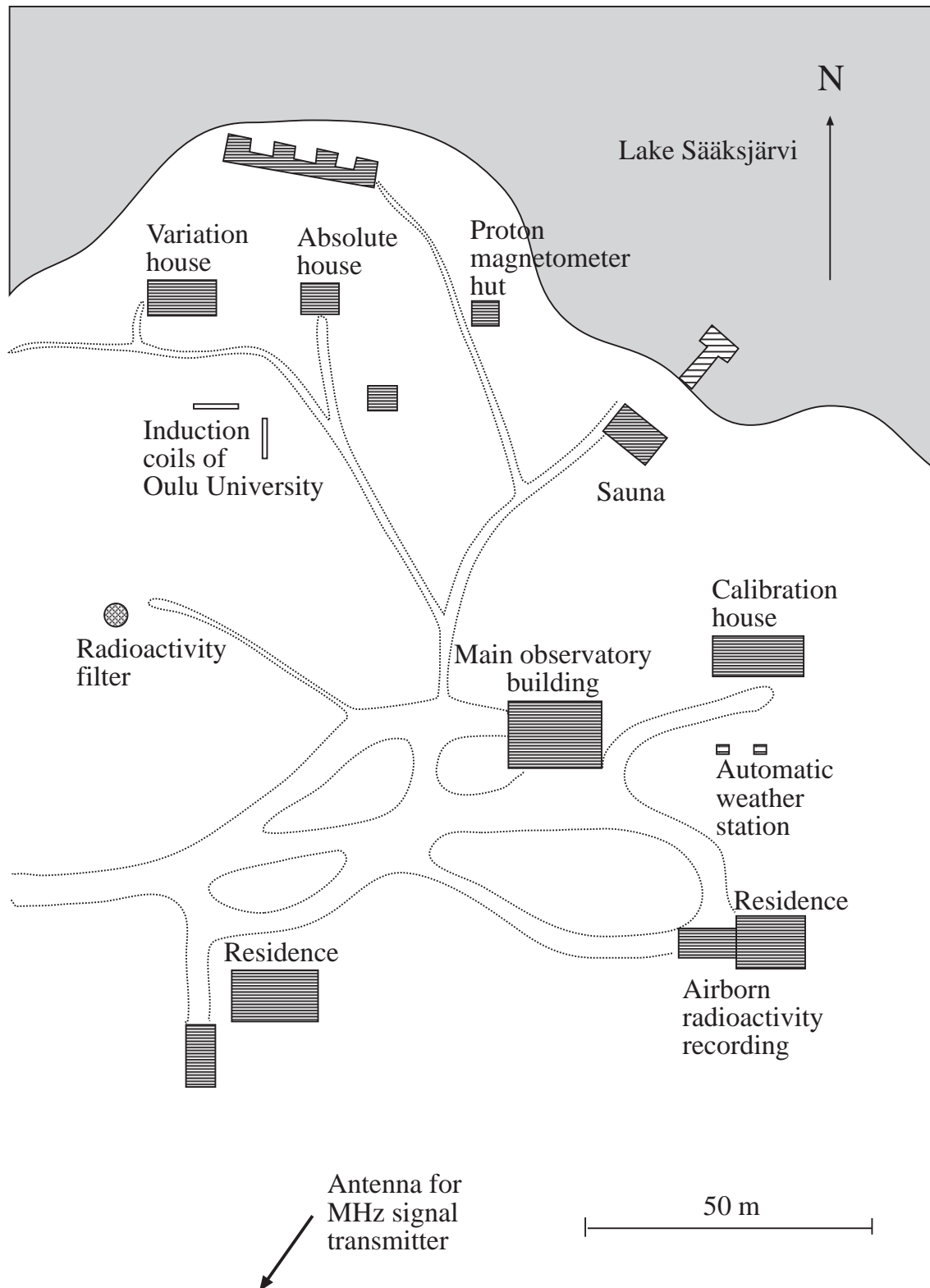


Figure 1: Map of the observatory area.

Year	X[nT]	Y[nT]	Z[nT]	
2002.5	11255	1600	51313	
2004.5	11237	1663	51392	
2005.5	11228	1690	51429	
2006.5	11229	1716	51459	
2007.5	11225	1747	51496	
2008.5	11217	1783	51529	
2009.5	11210	1820	51560	
2010.5	11197	1860	51596	
New-old	46	-76	78	New absolute point
2011.5	11225	1825	51713	
2012.5	11198	1871	51751	
2013.5	11175	1921	51788	
2014.5	11166	1954	51824	

Table 1: Annual mean values (all days) at the Pello IMAGE station.

The data sampling intervals at the IMAGE stations were 1, 10 and 60 seconds. The IMAGE standard used the 10s values and they were averages over the seconds 00-10, 10-20, 20-30 etc. The time stamp given for the 10-second period was the first second of that period.

All of the stations had either ADSL or direct network connections. The data of the twelve stations were processed and inspected at FMI and were sent for IMAGE filing.

6.1 Pello IMAGE station

Pello (PEL) ($66^{\circ}54.2'N$, $24^{\circ}04.7'E$) close to the border with Sweden in Lapland has a tilt suspended FGE magnetometer and absolute measurements are made once or twice in Summer. The annual mean values for all days were calculated and are listed in table 1.

6.2 Oulujärvi IMAGE station

At Oulujärvi (OUJ) ($64^{\circ}31'N$, $27^{\circ}14'E$) the tilt suspended LEMI-025 magnetometer is operating in the variation room. In the table 2 the annual mean values are for the last 10 years. The magnetometer is in a temperature controlled hut. Oulujärvi is a station of the Oulu University.

6.3 Tartu IMAGE station

Tartu (TAR) IMAGE station ($58^{\circ}15.8'N$, $26^{\circ}27.6'E$) is located in the area of Tõravere observatory of the Tartu University. The observatory has meteorological and astronomical observation systems. The station was not visited in 2014. A tilt suspended FGE is the magnetometer at Tartu.

6.4 Virolahti repeat station

Virolahti ($60^{\circ}33.7'N$, $27^{\circ}33.4'E$) in the South-East Finland is one of the old repeat stations in Finland started in 1947. The table 4 shows the results from the recent

Year	X[nT]	Y[nT]	Z[nT]	
2004.5	12878	2228	50998	
2005.5	12867	2256	51035	
2006.5	12866	2283	51063	
New-old	-21	+19	+9	New absolute house
2007.5	12837	2333	51106	
2008.5	12831	2366	51139	
2009.5	12824	2400	51173	
2010.5	12810	2431	51210	
2011.5	12785	2478	51251	
2012.5	12769	2524	51290	
2013.5	12758	2567	51323	
2014.5	12746	2603	51362	

Table 2: Annual mean values (all days) at the Oulujärvi IMAGE station.

Year	X[nT]	Y[nT]	Z[nT]
2002.5	15714	1981	48694
2004.5	15707	2040	48778
2005.5	15698	2070	48818
2006.5	15699	2098	48843
2007.5	15697	2131	48876
2008.5	15695	2162	48909
2009.5	15688	2203	48941
2011.5	15665	2281	49020
2012.5	15653	2316	49063
2013.5	15639	2368	49098
2014.5	15594	2455	49134

Table 3: Annual mean values (all days) at the Tartu IMAGE station.

Year	D[°]	H[nT]	Z[nT]
2002.5	7.763	14583	49655
2004.5	8.001	14580	49740
2005.5	8.118	14580	49778
2006.5	8.224	14583	49805
2007.5	8.357	14587	49839
2008.5	8.491	14596	49871
2009.5	8.624	14593	49900
2010.5	8.787	14571	49944
2012.5	9.136	14587	50014
2013.5	9.250	14554	50061
2014.5	9.550	14526	50107

Table 4: Reduced results from the Virolahti repeat station.

years.

7 IMAGE Magnetometer Network

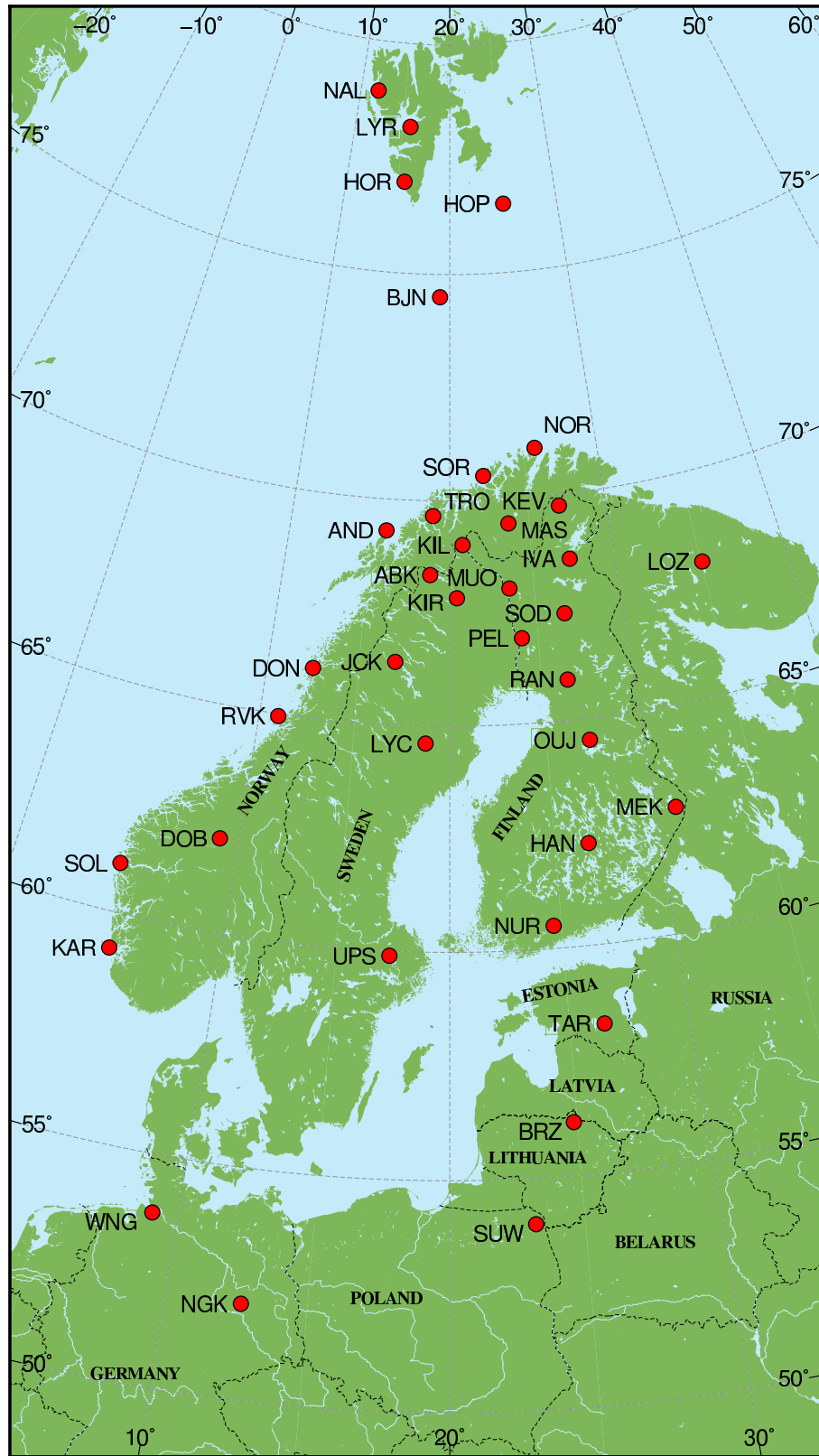
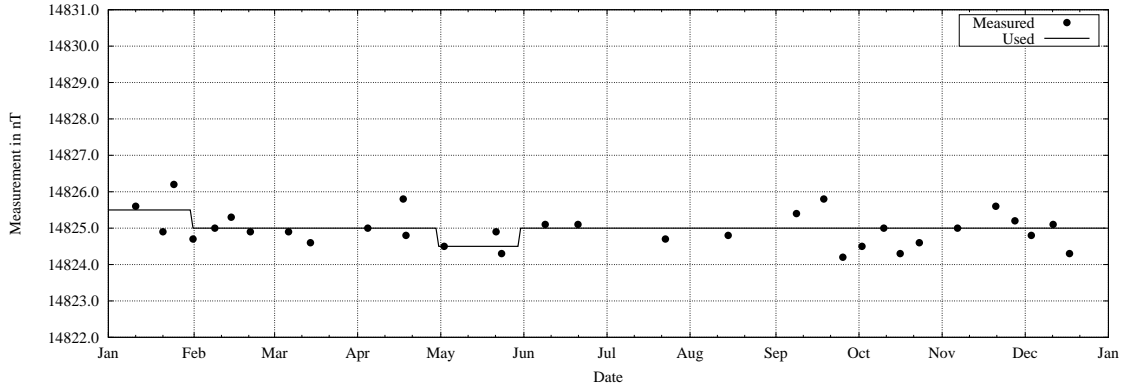
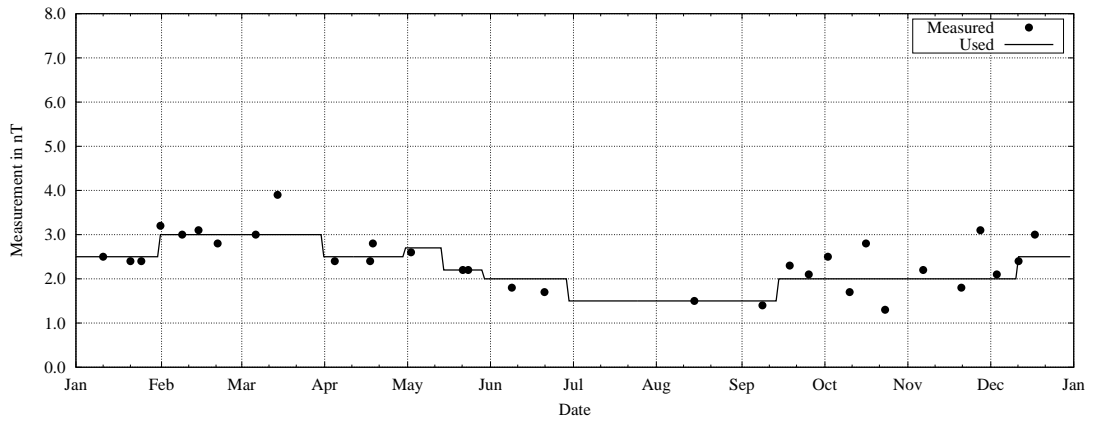


Figure 2: Map of IMAGE magnetometer network, December 2016

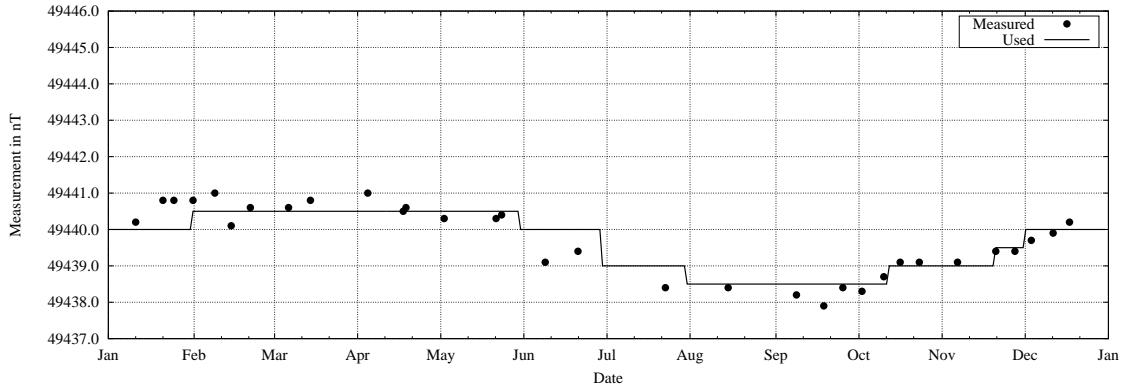
8 Baseline Measurements for FGE



(a) Baseline measurements for X component



(b) Baseline measurements for Y component



(c) Baseline measurements for Z component

Figure 3: Baseline measurements

9 Tables of Hourly Means of X, Y, and Z

Explanations of the tables:

- **X** is the North component of the magnetic vector
- **Y** is the East component of the magnetic vector
- **Z** is the vertical component of the magnetic vector
- The unit is nanotesla (nT) = 10^{-9} T
- The time is universal time (UTC). The local time is UTC + 2 h (during the daylight saving time UTC + 3 h)

Nurmijarvi Finland

January 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	-247	-243	-182	-101	-118	-129	-125	-116	-136	-143	-127	-115	-110	-109	-113	-107	-107	-104	-105	-102	-100	-102	-102	-107	-127
2		-110	-109	-108	-110	-111	-103	-95	-94	-94	-99	-104	-104	-96	-94	-95	-101	-108	-102	-98	-98	-94	-92	-95	-98	-100
3		-100	-97	-96	-96	-94	-90	-94	-99	-100	-106	-108	-105	-102	-95	-93	-100	-106	-100	-106	-106	-101	-110	-98	-99	-100
4		-100	-99	-97	-96	-93	-93	-93	-100	-99	-102	-103	-102	-97	-93	-92	-91	-93	-101	-96	-96	-90	-90	-95	-95	-96
5		-94	-92	-91	-89	-85	-81	-81	-83	-82	-88	-96	-96	-92	-86	-83	-83	-81	-86	-92	-95	-98	-88	-87	-86	-88
6	D	-97	-84	-95	-100	-92	-86	-85	-91	-100	-118	-131	-123	-105	-102	-105	-107	-93	-92	-93	-96	-99	-105	-111	-94	-100
7	D	-93	-110	-122	-91	-85	-85	-91	-100	-107	-105	-116	-106	-102	-103	-99	-100	-96	-104	-97	-104	-103	-98	-91	-92	-100
8		-94	-97	-92	-93	-94	-89	-93	-96	-106	-110	-105	-103	-107	-100	-105	-98	-95	-98	-97	-97	-97	-88	-89	-90	-97
9		-97	-97	-92	-91	-86	-87	-88	-92	-97	-102	-105	-107	-102	-98	-99	-97	-97	-93	-92	-91	-88	-88	-90	-88	-94
10		-90	-92	-92	-83	-81	-84	-84	-87	-93	-98	-106	-98	-100	-97	-95	-98	-94	-94	-93	-88	-84	-101	-104	-98	-93
11		-95	-92	-91	-87	-83	-80	-85	-93	-103	-100	-101	-102	-101	-98	-95	-98	-104	-106	-102	-101	-97	-107	-120	-98	
12		-98	-113	-104	-99	-98	-93	-90	-102	-103	-105	-106	-104	-103	-92	-89	-90	-95	-90	-93	-85	-107	-110	-101	-102	-99
13		-114	-99	-101	-89	-93	-91	-95	-97	-104	-106	-102	-98	-98	-104	-105	-100	-98	-95	-85	-103	-95	-95	-94	-96	-98
14		-95	-95	-95	-93	-91	-87	-92	-94	-101	-104	-98	-96	-95	-102	-104	-105	-111	-112	-108	-97	-99	-87	-94	-98	-98
15		-99	-98	-94	-94	-93	-93	-94	-95	-100	-100	-98	-97	-97	-96	-95	-96	-94	-91	-96	-95	-96	-91	-95	-96	-95
16	Q	-96	-94	-92	-90	-90	-88	-90	-91	-90	-91	-92	-91	-87	-84	-88	-89	-90	-91	-88	-88	-86	-88	-91	-93	-90
17	Q	-92	-91	-89	-87	-87	-84	-83	-88	-96	-99	-97	-96	-94	-95	-96	-100	-105	-111	-108	-101	-96	-95	-93	-92	-95
18		-92	-91	-90	-89	-87	-87	-88	-92	-97	-99	-100	-100	-99	-100	-98	-97	-104	-110	-98	-92	-91	-90	-79	-89	-94
19		-80	-90	-97	-100	-94	-86	-86	-87	-94	-94	-96	-93	-91	-92	-91	-91	-89	-89	-88	-89	-85	-88	-91	-94	-97
20	D	-86	-85	-83	-81	-78	-77	-83	-88	-102	-113	-109	-112	-105	-92	-53	38	30	89	-99	-135	-160	-149	-145	-156	-85
21	D	-140	-137	-118	-120	-118	-120	-102	-102	-111	-116	-124	-118	-115	-113	-109	-100	-96	-122	-124	-111	-128	-155	-84	-113	-117
22		-131	-113	-110	-104	-98	-111	-114	-102	-105	-112	-110	-110	-113	-109	-100	-99	-102	-99	-102	-101	-100	-102	-102	-104	-106
23		-104	-101	-100	-99	-102	-88	-87	-92	-109	-102	-104	-105	-107	-114	-104	-105	-99	-117	-107	-105	-101	-99	-98	-102	-102
24		-107	-100	-103	-102	-96	-97	-92	-100	-105	-106	-106	-101	-93	-92	-95	-94	-98	-90	-113	-103	-95	-94	-95	-97	-99
25	Q	-96	-96	-96	-95	-94	-94	-94	-101	-108	-112	-111	-107	-101	-93	-90	-90	-91	-91	-92	-92	-92	-93	-93	-94	-97
26		-94	-91	-89	-88	-87	-86	-87	-93	-97	-99	-97	-94	-94	-89	-88	-84	-86	-87	-86	-87	-88	-89	-90	-88	-90
27		-91	-92	-90	-85	-83	-80	-83	-86	-91	-97	-102	-100	-96	-91	-93	-96	-94	-88	-86	-86	-86	-88	-89	-90	-90
28		-90	-89	-86	-84	-82	-79	-82	-85	-98	-108	-107	-113	-109	-101	-97	-97	-96	-102	-107	-104	-101	-95	-89	-94	-96
29	Q	-95	-94	-94	-91	-91	-90	-91	-92	-100	-106	-108	-106	-103	-101	-98	-98	-95	-99	-101	-98	-95	-93	-91	-94	-97
30	Q	-92	-92	-89	-87	-86	-85	-84	-87	-90	-93	-94	-97	-96	-93	-91	-91	-93	-88	-86	-85	-87	-88	-88	-89	-90
31		-89	-86	-88	-84	-82	-84	-83	-85	-97	-101	-106	-108	-109	-112	-110	-105	-118	-123	-123	-125	-139	-134	-132	-138	-107
All		-103	-102	-99	-93	-92	-90	-91	-94	-100	-104	-105	-103	-101	-98	-96	-93	-94	-93	-99	-99	-100	-99	-97	-99	-98
Quiet		-94	-93	-92	-90	-90	-88	-88	-92	-97	-100	-100	-99	-96	-93	-93	-94	-96	-96	-95	-93	-91	-91	-91	-92	-94
Dist.		-133	-132	-120	-98	-98	-99	-97	-99	-111	-119	-121	-114	-107	-104	-96	-77	-72	-66	-103	-110	-118	-122	-107	-113	-106

January 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	845	805	753	693	637	630	650	707	699	688	701	694	690	688	694	692	690	693	698	699	698	702	700	703	702
2		705	689	702	703	698	700	698	696	692	689	690	688	680	690	691	689	693	696	699	705	706	705	698	695	696
3		695	693	695	696	696	699	698	700	699	695	687	682	683	690	693	691	691	712	703	707	706	712	694	697	696
4		697	696	696	693	692	697	698	698	700	696	689	681	681	687	691	692	691	706	700	700	701	702	696	695	695
5		694	692	693	693	693	692	693	697	695	692	689	684	683	685	687	689	689	691	691	704	704	696	692	687	692
6	D	670	686	710	703	697	696	699	698	703	701	695	676	689	690	695	711	691	690	694	703	727	736	706	694	698
7	D	694	698	689	697	697	696	695	696	695	685	693	697	689	690	698	714	693	694	738	725	710	699	696	695	699
8		699	696	685	695	695	692	698	698	695	695	692	682	692	689	712	691	692	694	707	700	700	701	705	696	696
9		701	698	696	696	696	696	695	696	698	697	692	691	684	686	684	691	694	699	695	696	697	698	698	694	694
10		694	695	696	694	693	694	699	699	701	697	694	684	683	690	687	693	692	692	695	702	728	744	713	701	698
11		696	695	694	692	688	686	696	702	703	697	692	689	686	689	684	682	684	672	691	744	711	709	775	755	701
12		719	716	691	694	694	696	700	707	705	704	696	682	685	688	687	682	687	688	694	736	733	745	717	718	703
13		708	726	708	695	693	700	701	702	702	698	696	688	684	689	697	691	691	714	729	713	700	700	699	698	701
14		698	697	694	691	694	695	700	702	703	705	698	687	684	686	690	690	691	692	699	704	710	704	703	703	697
15		701	702	710	702	701	701	701	698	693	690	687	685	689	690	691	692	695	700	698	698	701	699	698	698	697
16	Q	697	696	695	695	698	698	700	699	696	693	690	686	687	689	691	694	694	696	696	698	697	698	699	699	695
17	Q	697	698	698	698	698	699	701	701	701	697	691	684	684	689	681	684	690	695	703	704	702	700	697	696	695
18		696	694	694	694	695	698	701	703	700	697	693	688	687	684	687	690	691	693	695	696	698	696	694	695	694
19		695	715	706	699	701	703	701	701	698	693	685	685	688	689	691	692	692	693	693	694	694	694	696	693	695
20	D	690	689	689	690	691	693	684	688	694	698	687	689	669	650	657	647	628	673	749	740	756	783	760	736	697
21	D	731	736	731	713	717	696	687	701	697	685	694	675	686	685	691	673	729	694	701	715	715	708	749	723	705
22		732	699	694	703	702	703	698	709	699	703	703	685	687	693	690	683	692	696	698	703	693	709	720	706	700
23		698	703	700	699	682	683	699	695	707	705	699	685	680	687	695	692	704	723	699	706	708	705	707	703	699
24		687	696	703	699	699	700	702	703	702	700	694	685	676	680	681	665	683	691	733	768	711	703	700	698	698
25	Q	697	696	696	697	697	699	702	705	704	700	694	689	687	690	694	695	696	696	698	699	700	699	699	698	697
26		696	695	694	694	696	699	703	704	699	695	688	686	688	691	693	692	694	695	696	697	698	703	705	696	696
27		702	700	699	697	697	697	700	703	702	700	696	690	686	686	688	691	691	693	695	695	696	701	702	701	696
28		699	699	698	697	697	698	699	701	700	699	694	687	681	686	690	694	695	697	704	705	704	705	708	704	698
29	Q	699	697	696	695	698	701	705	707	706	700	695	690	686	688	691	695	697	697	699	703	702	703	702	702	698
30	Q	698	696	696	696	697	699	701	703	700	695	691	689	686	687	691	693	697	693	694	695	698	701	703	701	696
31		693	696	699	700	697	693	688	696	701	691	685	682	673	660	673	680	670	693	708	716	742	743	777	741	700
Quiet Dist.		704	703	700	697	694	694	697	700	700	696	693	686	684	686	689	689	690	695	703	709	708	710	710	704	697
		698	697	696	696	698	699	702	703	702	697	692	688	686	688	690	692	695	695	698	700	700	700	700	699	696
		726	723	714	699	688	682	683	698	698	691	694	686	685	680	687	687	686	689	716	716	721	725	722	710	700

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February 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-116	-121	-109	-98	-103	-90	-98	-106	-107	-102	-107	-110	-113	-111	-106	-104	-101	-97	-94	-94	-95	-96	-95	-94	-103
2		-94	-93	-93	-94	-92	-89	-87	-83	-83	-86	-94	-96	-91	-87	-85	-98	-95	-99	-101	-93	-91	-106	-109	-113	-94
3		-116	-103	-103	-95	-88	-91	-93	-95	-95	-101	-104	-100	-95	-92	-93	-95	-98	-98	-96	-92	-96	-96	-92	-93	-97
4		-93	-93	-91	-89	-86	-85	-85	-90	-93	-94	-98	-99	-107	-101	-96	-94	-96	-88	-88	-93	-90	-88	-87	-86	-92
5		-90	-96	-87	-85	-84	-93	-89	-87	-90	-104	-107	-103	-99	-97	-104	-94	-101	-99	-103	-78	-94	-94	-94	-89	-94
6		-92	-93	-93	-93	-90	-86	-87	-95	-100	-103	-107	-104	-99	-94	-93	-93	-88	-90	-95	-99	-95	-89	-93	-94	-94
7		-91	-92	-89	-86	-84	-84	-81	-85	-84	-87	-91	-97	-103	-99	-95	-103	-112	-124	-122	-119	-118	-117	-119	-121	-100
8	D	-144	-148	-98	-89	-102	-98	-122	-115	-105	-111	-115	-119	-110	-102	-100	-101	-101	-98	-97	-97	-97	-98	-96	-96	-107
9		-94	-93	-88	-86	-84	-83	-83	-82	-87	-102	-107	-109	-97	-87	-96	-93	-95	-92	-90	-93	-93	-95	-82	-97	-92
10		-102	-102	-88	-93	-94	-94	-97	-100	-104	-105	-108	-107	-102	-100	-100	-98	-95	-94	-95	-97	-101	-98	-104	-104	-99
11		-99	-98	-97	-94	-83	-80	-83	-91	-92	-96	-105	-108	-107	-102	-100	-103	-112	-104	-98	-92	-93	-99	-129	-143	-100
12		-125	-123	-116	-108	-108	-100	-95	-94	-90	-91	-112	-113	-99	-95	-97	-90	-89	-88	-85	-77	-76	-78	-81	-83	-96
13		-85	-88	-86	-79	-74	-76	-87	-90	-93	-98	-107	-111	-104	-94	-88	-90	-91	-91	-89	-88	-87	-86	-88	-89	-90
14		-92	-93	-94	-90	-89	-89	-89	-91	-98	-104	-107	-105	-100	-100	-94	-95	-105	-118	-96	-92	-91	-93	-89	-87	-96
15		-84	-89	-92	-88	-86	-89	-87	-86	-93	-99	-102	-102	-101	-98	-93	-89	-90	-86	-85	-90	-92	-97	-122	-105	-93
16	D	-141	-130	-97	-104	-95	-92	-84	-84	-88	-115	-105	-88	-100	-120	-67	-97	-88	-97	-122	-124	-105	-110	-147	-140	-106
17	D	-120	-155	-128	-104	-101	-96	-108	-126	-116	-102	-110	-116	-112	-109	-98	-104	-107	-104	-87	-95	-120	-172	-187	-143	-117
18	D	-148	-118	-139	-177	-122	-106	-123	-113	-124	-142	-122	-110	-109	-111	-101	-102	-114	-98	-72	-113	-121	-107	-120	-111	-118
19	D	-97	-108	-113	-113	-102	-100	-102	-103	-104	-108	-108	-126	-102	-103	-102	-105	-76	-117	-84	-107	-113	-104	-105	-106	-104
20		-99	-104	-104	-101	-101	-100	-99	-101	-109	-113	-117	-112	-106	-100	-102	-98	-103	-101	-97	-99	-99	-99	-96	-93	-102
21	Q	-97	-98	-95	-96	-94	-94	-90	-96	-105	-107	-107	-105	-100	-99	-100	-97	-94	-94	-96	-101	-102	-93	-92	-92	-98
22	Q	-93	-94	-94	-94	-93	-90	-90	-93	-100	-105	-103	-100	-94	-90	-87	-90	-90	-88	-87	-88	-89	-89	-88	-93	-93
23		-91	-89	-92	-90	-88	-87	-85	-87	-92	-98	-103	-97	-95	-92	-91	-88	-90	-88	-96	-93	-98	-95	-108	-97	-93
24		-94	-99	-94	-94	-94	-95	-96	-102	-107	-109	-105	-100	-94	-97	-89	-88	-90	-94	-88	-88	-98	-97	-93	-95	-96
25		-85	-90	-92	-92	-88	-87	-82	-84	-90	-97	-100	-99	-98	-95	-90	-86	-82	-83	-85	-83	-76	-75	-82	-88	-88
26		-76	-96	-92	-88	-80	-83	-87	-91	-96	-102	-105	-103	-103	-95	-93	-95	-92	-91	-89	-91	-95	-89	-87	-88	-92
27	Q	-87	-87	-87	-86	-84	-82	-79	-85	-94	-101	-106	-106	-97	-90	-86	-85	-88	-90	-91	-90	-88	-84	-87	-87	-90
28	Q	-85	-85	-86	-85	-85	-81	-82	-89	-97	-98	-97	-93	-90	-92	-98	-94	-90	-87	-87	-88	-89	-90	-95	-93	-90
29	Q	-92	-90	-87	-86	-84	-84	-85	-85	-87	-92	-100	-95	-90	-90	-83	-83	-83	-81	-78	-76	-75	-80	-90	-100	-86
All		-101	-102	-97	-96	-92	-90	-92	-94	-97	-102	-105	-105	-101	-98	-94	-95	-95	-96	-93	-94	-96	-97	-102	-100	-97
Quiet		-91	-91	-90	-89	-88	-86	-85	-90	-97	-101	-102	-100	-94	-92	-91	-90	-89	-88	-88	-88	-88	-87	-91	-92	-91
Dist.		-130	-132	-115	-117	-104	-99	-108	-107	-116	-112	-112	-112	-106	-109	-94	-102	-97	-103	-92	-107	-111	-118	-131	-119	-110

February 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		745	726	719	712	692	686	697	703	698	694	701	698	692	691	694	694	695	694	696	699	702	701	701	700	701	
2		699	698	697	698	698	699	699	702	702	692	692	687	683	683	684	683	688	687	701	700	703	733	720	721	698	
3		762	772	745	743	704	692	708	713	705	698	690	685	682	684	690	695	697	696	696	700	699	701	700	699	707	
4		698	696	696	697	697	699	702	707	704	697	692	686	682	691	691	691	693	693	695	705	702	698	697	695	696	
5		696	684	692	697	698	700	698	702	697	698	693	691	684	683	692	698	695	701	713	712	711	706	700	698	698	
6		698	696	693	686	697	706	708	708	702	694	693	688	691	690	693	698	700	706	699	708	708	704	704	708	699	
7		709	705	700	698	699	699	700	703	700	696	689	683	679	677	677	694	738	691	707	729	728	733	740	749	705	
8	D	778	731	722	746	719	720	703	678	705	699	688	689	686	691	693	695	698	700	701	706	706	700	701	706	706	
9		703	703	698	707	704	701	700	698	698	697	689	676	677	677	687	683	689	694	695	700	706	713	742	720	698	
10		715	709	699	714	712	709	706	705	702	699	695	693	689	689	692	695	696	696	709	704	706	717	718	716	704	
11		722	718	713	711	712	704	698	694	694	689	687	679	675	670	665	671	662	695	697	702	711	715	753	759	700	
12		756	740	723	720	714	708	707	707	703	688	699	680	683	678	681	686	687	686	683	690	695	701	700	706	701	
13		706	704	703	701	699	699	702	699	700	694	693	688	682	680	685	693	697	697	698	699	701	704	705	704	697	
14		702	702	694	696	705	707	702	703	702	697	689	684	682	687	693	693	700	732	698	700	707	712	704	702	700	
15		704	701	694	707	709	705	698	690	700	690	689	677	681	688	690	691	690	691	692	697	713	720	709	729	698	
16	D	738	697	728	721	719	717	725	720	709	706	691	671	650	663	647	719	683	775	718	731	750	728	731	700	710	
17	D	732	724	693	709	709	710	713	713	709	706	685	689	679	699	677	711	689	694	752	764	802	772	762	787	720	
18	D	742	699	716	708	707	712	720	719	700	697	692	686	685	700	699	699	727	696	763	728	718	709	689	687	708	
19	D	716	722	706	700	704	711	713	716	715	710	698	702	696	691	701	705	747	708	735	731	725	723	711	707	712	
20		694	700	706	706	703	704	713	717	716	712	703	692	690	692	696	700	697	697	700	702	706	705	701	702	702	
21	Q	706	705	706	709	707	706	709	710	711	707	701	696	691	691	696	694	696	695	702	713	722	740	725	710	706	
22	Q	704	703	706	707	706	705	706	707	703	697	689	688	684	683	687	689	693	697	700	701	704	704	705	706	699	
23		706	702	701	704	704	704	704	707	705	697	693	689	685	683	687	688	689	689	699	698	712	769	745	734	704	
24		727	715	718	713	712	708	709	709	705	698	688	682	675	682	681	685	687	689	692	698	717	707	710	710	701	
25		714	715	711	710	711	707	703	709	708	705	699	691	684	685	685	687	688	686	688	695	696	696	701	708	699	
26		716	710	699	693	704	701	703	708	710	705	697	689	690	690	693	696	695	696	698	707	715	706	702	701	701	
27	Q	701	700	699	698	697	698	698	703	701	691	684	687	685	687	689	693	695	695	696	698	703	705	704	702	696	
28	Q	700	699	702	703	704	705	708	709	706	695	685	679	678	684	687	691	696	699	703	708	709	713	707	699	699	
29	Q	700	693	702	703	704	706	708	707	704	698	691	685	683	688	691	694	695	695	695	695	695	695	700	718	721	699
All Quiet Dist.		717	709	706	707	705	704	705	706	704	698	692	686	683	685	687	693	697	699	704	707	713	715	714	713	702	
		702	700	703	704	703	704	706	707	705	698	690	687	684	687	690	692	695	696	698	702	706	712	713	709	700	
		741	714	713	717	712	714	715	709	708	704	691	687	679	689	683	706	714	734	731	740	727	719	716	711	701	

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March 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-99	-94	-84	-80	-76	-78	-79	-85	-86	-89	-94	-100	-100	-92	-89	-85	-87	-89	-89	-87	-85	-84	-87	-91	-88
2		-92	-91	-86	-85	-85	-83	-83	-90	-97	-102	-102	-106	-100	-93	-89	-103	-96	-93	-92	-87	-85	-84	-86	-87	-92
3		-87	-87	-86	-87	-84	-87	-85	-98	-106	-109	-100	-96	-96	-99	-93	-91	-88	-88	-86	-87	-88	-84	-84	-91	-91
4	Q	-86	-88	-90	-95	-92	-90	-92	-95	-96	-99	-102	-103	-100	-95	-94	-95	-94	-91	-88	-85	-85	-86	-85	-86	-92
5	Q	-85	-85	-85	-84	-82	-81	-81	-86	-100	-102	-105	-100	-109	-99	-93	-90	-88	-87	-88	-86	-85	-82	-82	-82	-89
6	D	-80	-81	-80	-79	-78	-77	-80	-82	-92	-94	-94	-91	-82	-78	-68	-62	-58	-6	-91	-74	-109	-420	-372	-205	-110
7	D	-228	-143	-128	-159	-134	-121	-121	-132	-136	-123	-118	-112	-93	-91	-101	-111	-99	-102	-107	-130	-122	-136	-108	-123	-124
8		-120	-109	-114	-113	-109	-109	-116	-123	-126	-126	-122	-113	-107	-103	-111	-111	-103	-103	-92	-97	-100	-97	-98	-101	-109
9		-105	-106	-102	-95	-96	-96	-102	-112	-126	-128	-122	-112	-107	-100	-95	-106	-102	-97	-95	-97	-113	-113	-114	-110	-106
10		-97	-103	-100	-96	-94	-93	-88	-103	-114	-123	-125	-122	-113	-104	-98	-94	-94	-91	-93	-97	-103	-95	-90	-88	-101
11		-94	-96	-97	-96	-90	-84	-85	-93	-107	-110	-99	-90	-94	-87	-101	-107	-90	-90	-86	-82	-108	-97	-92	-91	-94
12		-97	-95	-89	-93	-94	-96	-88	-88	-102	-114	-112	-112	-105	-97	-90	-91	-94	-107	-116	-114	-96	-95	-90	-93	-99
13	Q	-94	-93	-93	-91	-90	-89	-96	-100	-106	-112	-111	-106	-100	-94	-91	-91	-90	-88	-87	-87	-86	-86	-85	-86	-94
14		-90	-89	-89	-89	-86	-88	-90	-98	-108	-116	-113	-108	-102	-97	-92	-91	-87	-74	-56	-64	-91	-77	-103	-117	-92
15	D	-93	-112	-110	-110	-93	-104	-143	-142	-133	-130	-118	-118	-114	-102	-96	-91	-94	-102	-98	-116	-98	-116	-121	-121	-111
16	D	-147	-112	-92	-91	-96	-103	-115	-115	-112	-107	-115	-107	-97	-99	-99	-99	-96	-94	-92	-106	-125	-146	-147	-137	-110
17	D	-126	-135	-143	-105	-101	-115	-111	-104	-104	-121	-126	-115	-106	-101	-96	-99	-98	-82	-100	-100	-94	-96	-100	-101	-107
18		-101	-101	-104	-101	-98	-100	-114	-119	-114	-108	-103	-99	-96	-102	-106	-101	-102	-100	-99	-106	-110	-101	-99	-101	-104
19		-100	-100	-100	-97	-94	-109	-108	-135	-148	-146	-137	-128	-110	-102	-113	-111	-110	-109	-111	-104	-103	-101	-99	-100	-111
20		-102	-102	-102	-106	-97	-97	-107	-114	-122	-128	-126	-120	-110	-95	-88	-88	-102	-108	-115	-122	-120	-115	-112	-108	-109
21		-103	-93	-100	-99	-98	-97	-98	-108	-112	-122	-120	-113	-104	-95	-87	-86	-93	-89	-86	-86	-85	-87	-85	-89	-97
22		-91	-93	-90	-86	-81	-80	-84	-93	-107	-122	-119	-112	-111	-103	-93	-92	-90	-88	-88	-86	-85	-83	-84	-88	-94
23		-87	-83	-82	-81	-73	-86	-97	-93	-106	-117	-121	-116	-102	-98	-92	-87	-86	-82	-81	-86	-91	-93	-88	-78	-92
24		-85	-94	-94	-88	-83	-84	-89	-104	-109	-112	-109	-108	-102	-91	-88	-88	-87	-86	-85	-83	-83	-85	-87	-91	-92
25	Q	-92	-94	-96	-95	-90	-89	-92	-99	-108	-118	-117	-114	-109	-99	-94	-97	-89	-88	-88	-84	-84	-87	-88	-87	-96
26	Q	-87	-88	-87	-85	-82	-80	-81	-91	-101	-113	-119	-115	-105	-93	-87	-84	-84	-84	-80	-80	-78	-75	-72	-71	-88
27		-75	-78	-81	-78	-76	-77	-81	-79	-96	-123	-115	-103	-101	-97	-84	-97	-80	-108	-98	-85	-84	-85	-80	-82	-89
28		-89	-86	-89	-90	-87	-85	-96	-109	-114	-111	-105	-95	-88	-81	-84	-85	-82	-79	-86	-86	-94	-92	-88	-91	-96
29		-90	-108	-109	-86	-83	-87	-94	-102	-109	-116	-117	-120	-105	-93	-83	-83	-91	-101	-91	-88	-87	-89	-84	-89	-96
30		-89	-87	-96	-86	-84	-85	-88	-96	-111	-115	-114	-101	-107	-113	-98	-85	-95	-98	-94	-81	-90	-91	-89	-86	-95
31		-92	-100	-96	-100	-90	-88	-92	-104	-106	-114	-114	-110	-104	-99	-94	-92	-91	-90	-86	-86	-86	-86	-89	-89	-96
All		-100	-97	-97	-94	-90	-91	-96	-102	-110	-115	-114	-109	-103	-97	-93	-93	-92	-90	-91	-92	-95	-105	-103	-99	-99
Quiet		-89	-89	-90	-90	-87	-86	-88	-94	-102	-109	-111	-108	-105	-96	-92	-91	-89	-88	-86	-84	-83	-83	-82	-82	-92
Dist.		-135	-117	-111	-109	-100	-104	-114	-115	-115	-114	-109	-98	-94	-92	-92	-89	-77	-97	-105	-109	-183	-170	-137	-113	-113

March 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		709	684	708	706	705	706	706	702	703	695	686	684	681	685	688	689	687	690	692	697	698	699	702	721	697
2		727	713	711	708	708	708	711	714	711	702	689	684	681	685	688	688	692	714	701	700	699	700	702	701	702
3		697	699	705	707	705	701	703	704	699	691	688	688	683	683	692	697	697	699	701	700	702	706	706	708	698
4	Q	694	705	711	713	710	710	715	716	712	704	695	686	681	682	690	698	699	697	700	700	701	702	702	702	701
5	Q	702	702	702	702	704	707	712	714	704	695	687	678	679	681	688	693	695	695	697	699	702	703	702	702	698
6	D	702	703	703	704	705	705	707	707	707	699	689	680	670	668	661	646	643	640	707	724	775	783	776	743	702
7	D	756	722	729	719	741	733	728	718	703	693	686	693	690	703	697	702	728	722	714	754	790	744	749	735	723
8		742	722	719	723	726	724	721	719	709	699	688	683	681	689	687	702	708	708	724	713	710	704	707	708	709
9		707	706	704	710	710	715	721	721	720	704	690	680	678	679	690	684	698	703	704	707	731	724	716	714	705
10		709	714	714	718	720	715	715	715	712	706	693	683	674	675	681	693	691	693	701	707	713	716	702	708	703
11		713	717	720	715	719	717	718	721	718	708	693	681	672	662	674	686	687	692	694	701	738	744	712	707	705
12		689	688	708	710	708	708	713	718	719	713	699	689	684	687	693	699	711	750	736	718	707	705	707	704	707
13	Q	704	706	706	706	707	709	717	718	715	707	696	688	688	689	693	696	696	696	699	700	702	703	703	707	702
14		706	700	712	709	707	708	712	711	706	694	684	681	678	685	688	691	693	688	675	678	699	751	741	746	702
15	D	725	687	711	704	726	715	695	672	694	694	690	684	684	693	698	700	699	708	700	730	772	739	739	777	710
16	D	724	755	728	718	720	720	714	704	708	696	678	672	683	694	688	697	699	695	710	716	740	772	746	756	714
17	D	716	715	664	690	718	726	716	711	706	696	687	688	690	700	709	709	713	745	718	702	697	703	709	709	706
18		709	709	706	709	715	724	728	716	707	697	691	682	679	668	675	691	703	703	702	721	718	715	708	724	704
19		723	724	718	717	723	720	719	723	707	700	690	688	686	680	697	698	713	764	716	715	720	722	710	706	712
20		708	709	711	701	715	724	728	730	724	708	691	680	681	684	689	694	699	713	758	732	722	731	731	718	712
21		715	710	710	707	709	716	724	725	721	710	695	679	673	674	682	692	693	701	716	713	709	708	711	706	704
22		702	700	697	700	711	718	724	726	721	710	695	680	682	687	695	700	703	705	705	706	705	709	711	708	704
23		706	705	706	703	707	715	701	704	715	711	698	690	685	690	695	699	700	700	702	711	724	723	707	698	704
24		717	712	711	708	714	720	726	729	723	709	693	684	680	679	684	693	698	697	700	702	706	706	703	708	704
25	Q	697	704	718	718	716	717	723	727	726	715	697	685	680	682	693	706	703	703	704	707	708	705	705	705	706
26	Q	706	706	707	707	707	713	722	725	725	712	694	683	680	682	688	692	695	694	694	697	699	700	706	707	702
27		706	701	695	711	712	715	719	720	711	705	690	678	672	674	684	689	693	722	710	701	698	703	714	719	702
28		710	710	711	704	682	700	713	719	714	701	691	682	679	682	687	694	696	697	701	727	724	716	699	702	702
29		701	700	703	716	718	719	712	723	711	698	684	683	675	683	690	700	710	733	704	702	712	712	707	701	704
30		696	681	694	714	719	724	728	730	723	708	695	680	672	680	693	701	709	710	710	710	722	712	707	706	705
31		715	710	716	705	710	716	716	714	710	701	690	686	685	689	698	701	705	712	705	705	704	704	706	704	704
Quiet Dist.		711	707	708	709	713	715	716	716	712	703	691	683	680	683	689	694	698	706	707	710	718	718	714	715	705
		700	705	709	709	709	711	718	720	716	707	694	684	682	683	690	697	697	697	699	701	702	703	703	704	702
		724	716	707	707	722	720	712	702	704	696	686	684	683	692	691	691	696	702	710	725	755	748	744	744	711

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April 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	-89	-91	-91	-89	-88	-89	-95	-101	-106	-112	-110	-104	-98	-94	-89	-89	-85	-83	-81	-81	-80	-81	-78	-78	-91
2	D	-77	-81	-82	-84	-84	-86	-92	-101	-109	-113	-109	-100	-86	-79	-68	-84	-47	-88	-103	-111	-140	-147	-125	-195	-100
3		-148	-134	-107	-104	-106	-116	-117	-121	-112	-114	-127	-116	-106	-97	-89	-90	-91	-95	-98	-96	-103	-97	-109	-104	-108
4		-103	-96	-100	-103	-88	-86	-94	-101	-109	-115	-111	-100	-96	-87	-94	-89	-90	-88	-84	-85	-91	-91	-97	-96	-96
5		-97	-96	-97	-96	-93	-94	-99	-107	-113	-115	-117	-106	-91	-96	-92	-87	-89	-88	-89	-88	-91	-95	-91	-96	-97
6		-97	-100	-94	-88	-83	-81	-91	-109	-119	-132	-128	-109	-92	-87	-84	-81	-93	-89	-91	-90	-93	-94	-98	-95	-97
7		-94	-92	-91	-87	-85	-87	-91	-103	-115	-115	-106	-97	-91	-84	-81	-77	-74	-61	-73	-86	-156	-185	-183	-204	-105
8		-98	-112	-93	-90	-88	-89	-98	-107	-114	-123	-118	-116	-107	-98	-94	-91	-91	-91	-88	-84	-87	-89	-90	-93	-98
9	Q	-93	-92	-92	-91	-88	-86	-91	-104	-118	-132	-134	-125	-109	-101	-94	-86	-87	-87	-85	-84	-83	-83	-84	-84	-96
10		-88	-87	-86	-89	-87	-86	-92	-105	-126	-121	-114	-105	-98	-96	-90	-85	-83	-82	-80	-79	-79	-80	-87	-83	-92
11		-88	-86	-85	-85	-85	-90	-98	-107	-116	-121	-121	-115	-104	-91	-91	-82	-89	-79	-80	-76	-75	-72	-74	-79	-91
12	D	-85	-91	-98	-92	-85	-88	-88	-96	-110	-122	-126	-107	-89	-90	-70	-83	-84	-83	-85	-101	-95	-114	-110	-130	-97
13	D	-120	-120	-122	-106	-113	-126	-133	-131	-132	-134	-125	-128	-104	-85	-74	-86	-111	-98	-85	-107	-103	-95	-105	-113	-111
14	D	-120	-113	-119	-116	-105	-98	-107	-114	-121	-122	-133	-129	-87	-70	-80	-85	-68	-94	-104	-117	-145	-111	-99	-110	-107
15		-104	-110	-123	-107	-105	-110	-114	-120	-126	-124	-118	-115	-110	-98	-95	-94	-89	-84	-79	-77	-80	-75	-75	-83	-101
16		-87	-90	-90	-91	-91	-94	-102	-115	-129	-123	-112	-105	-93	-79	-81	-82	-83	-74	-85	-109	-137	-140	-121	-105	-101
17	D	-108	-104	-84	-89	-104	-132	-129	-123	-132	-134	-132	-130	-113	-104	-87	-86	-88	-87	-77	-69	-86	-84	-83	-85	-102
18		-86	-89	-91	-91	-91	-94	-103	-111	-117	-125	-124	-117	-113	-104	-99	-96	-95	-91	-86	-88	-89	-91	-92	-90	-99
19	Q	-88	-87	-88	-89	-90	-94	-101	-111	-120	-124	-120	-107	-90	-93	-87	-88	-87	-87	-87	-86	-85	-85	-84	-82	-94
20	Q	-82	-80	-79	-80	-79	-81	-88	-100	-112	-121	-113	-103	-96	-90	-91	-94	-90	-89	-85	-82	-83	-81	-83	-88	-90
21		-86	-84	-83	-83	-81	-84	-90	-103	-111	-114	-113	-99	-91	-87	-87	-80	-79	-79	-82	-77	-77	-77	-76	-79	-88
22		-82	-86	-83	-84	-89	-95	-103	-107	-111	-112	-114	-99	-90	-72	-99	-71	-103	-83	-83	-81	-76	-73	-95	-90	-91
23		-90	-88	-89	-89	-89	-87	-91	-101	-113	-120	-118	-111	-87	-93	-100	-84	-82	-80	-70	-77	-77	-65	-85	-89	-91
24		-86	-88	-86	-85	-87	-91	-98	-107	-114	-119	-117	-106	-101	-83	-100	-72	-77	-92	-81	-85	-84	-86	-85	-84	-92
25		-84	-83	-83	-86	-88	-93	-99	-103	-117	-121	-123	-114	-101	-86	-90	-90	-85	-86	-83	-79	-81	-82	-85	-87	-93
26		-88	-87	-88	-88	-86	-91	-95	-101	-107	-110	-119	-110	-104	-90	-86	-83	-82	-87	-84	-78	-87	-83	-87	-84	-92
27		-82	-82	-82	-85	-91	-91	-93	-95	-112	-116	-115	-110	-109	-102	-68	-78	-86	-81	-74	-82	-82	-97	-101	-94	-92
28		-90	-90	-95	-88	-87	-86	-90	-97	-103	-118	-124	-115	-98	-90	-88	-89	-88	-83	-81	-84	-83	-84	-83	-87	-92
29	Q	-85	-87	-88	-86	-87	-89	-95	-102	-109	-116	-116	-111	-91	-98	-88	-83	-79	-77	-74	-72	-76	-75	-74	-74	-89
30		-78	-79	-76	-73	-75	-81	-86	-92	-106	-120	-121	-103	-94	-83	-73	-79	-71	-71	-78	-81	-87	-93	-99	-95	-87
All Quiet		-93	-93	-92	-90	-90	-93	-99	-107	-115	-120	-119	-110	-98	-90	-87	-85	-85	-85	-84	-86	-93	-93	-94	-99	-96
Dist.		-87	-87	-87	-87	-86	-88	-94	-103	-113	-121	-119	-110	-99	-95	-89	-88	-86	-84	-82	-81	-81	-81	-81	-81	-92
Dist.		-102	-102	-101	-97	-98	-106	-110	-113	-121	-125	-119	-96	-85	-76	-85	-79	-90	-91	-101	-114	-110	-104	-127	-103	

April 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	703	705	707	711	714	718	721	721	714	705	692	686	684	690	696	698	700	700	699	701	714	704	701	704	704
2	D	704	703	711	713	714	719	723	721	715	706	696	686	678	673	673	685	704	740	714	716	709	767	759	776	716
3		725	729	722	714	725	726	712	709	712	694	687	682	682	686	691	700	708	705	710	713	721	734	721	720	709
4		713	726	731	714	716	727	731	729	725	714	705	689	687	685	691	698	700	703	705	704	706	715	711	710	710
5		710	714	717	717	721	722	722	719	713	701	691	681	670	679	682	690	696	705	717	731	737	716	715	709	707
6		710	709	702	716	722	728	730	726	716	704	693	679	668	676	688	710	706	713	713	713	717	718	712	709	707
7		707	695	703	709	719	726	728	722	710	697	680	672	671	677	685	690	693	691	691	710	772	772	745	743	709
8		750	756	721	729	729	729	736	733	723	709	696	685	683	687	695	701	704	706	706	707	709	710	710	711	713
9	Q	711	713	714	718	723	730	735	735	728	714	696	683	679	684	693	702	710	709	707	705	704	703	704	706	709
10		706	709	713	716	718	722	724	724	712	701	690	676	672	678	690	702	705	703	703	702	703	702	710	710	704
11		713	713	714	718	722	727	729	726	718	704	694	683	677	682	689	695	726	711	699	695	700	710	702	704	706
12	D	708	712	716	717	731	731	730	727	719	706	691	675	663	653	653	675	688	688	711	733	711	717	775	737	707
13	D	722	767	735	735	736	735	730	711	708	700	685	674	667	679	727	712	705	721	711	738	723	715	717	708	716
14	D	716	715	717	718	717	730	733	730	721	709	694	680	675	685	672	675	754	715	718	719	736	730	723	713	712
15		713	719	700	720	726	728	727	721	716	706	695	684	682	681	683	687	693	697	699	698	701	706	705	710	704
16		711	714	717	720	720	722	729	727	708	692	685	675	671	666	670	677	692	744	720	751	756	751	737	709	711
17	D	679	706	731	734	731	713	690	687	692	685	677	662	655	658	670	698	691	693	703	740	724	726	719	711	699
18		714	717	720	723	725	725	723	724	720	708	699	688	687	692	697	705	708	710	707	708	710	708	709	707	710
19	Q	707	707	709	714	716	721	725	723	720	711	698	689	685	693	702	705	707	707	707	706	707	706	706	705	707
20	Q	705	705	709	710	717	724	723	717	712	699	685	674	681	691	701	706	708	710	710	709	709	711	713	705	706
21		704	706	707	712	721	729	730	728	719	703	690	675	674	682	692	697	703	706	714	707	704	705	707	709	705
22		712	713	709	718	723	726	728	724	714	700	690	677	675	679	691	698	699	704	704	706	712	748	718	713	708
23		709	710	712	715	730	734	735	731	721	703	684	672	663	672	683	693	698	697	701	708	718	737	724	728	707
24		711	711	714	720	722	723	725	724	714	700	687	677	673	681	690	701	726	711	704	727	730	707	706	708	708
25		707	711	713	719	720	720	719	723	716	710	697	684	678	679	689	697	703	709	712	711	706	704	707	707	706
26		708	710	714	717	722	724	727	726	720	706	701	690	685	689	698	707	704	704	702	704	724	732	714	711	710
27		711	713	718	717	714	711	713	715	712	707	702	690	683	688	690	713	704	699	700	708	728	723	716	707	708
28		706	711	711	721	727	729	728	726	720	711	699	689	684	688	692	698	705	706	707	709	708	709	710	710	709
29	Q	709	714	719	725	729	734	733	731	724	713	703	694	687	686	687	690	696	701	703	703	706	706	707	708	709
30		715	716	720	724	729	733	734	731	723	709	697	685	679	681	687	698	697	698	701	706	715	728	720	713	710
All Quiet Dist.		710	715	715	718	723	725	726	723	716	704	693	681	677	681	688	697	704	707	707	713	720	721	717	714	708
		707	709	712	715	720	725	728	725	720	708	695	685	683	689	696	700	704	705	705	705	708	706	706	705	707
		706	720	722	723	726	726	721	715	711	701	689	675	671	679	689	708	711	711	729	737	731	739	729	710	

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May 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	-88	-86	-87	-86	-91	-103	-107	-112	-112	-116	-113	-104	-89	-85	-59	-61	-88	-79	-85	-125	-134	-118	-114	-118	-98
2	D	-167	-109	-118	-149	-107	-111	-123	-128	-132	-130	-135	-125	-105	-91	-87	-69	-61	-81	-92	-129	-128	-159	-170	-136	-118
3		-122	-102	-124	-129	-130	-117	-123	-127	-124	-129	-123	-115	-108	-107	-97	-78	-82	-70	-81	-90	-93	-86	-96	-98	-106
4	Q	-95	-86	-98	-98	-103	-112	-121	-127	-130	-126	-121	-116	-105	-91	-90	-101	-93	-86	-86	-90	-90	-86	-91	-92	-102
5		-91	-89	-90	-92	-92	-95	-98	-104	-107	-127	-126	-128	-105	-97	-104	-103	-81	-83	-84	-84	-87	-89	-90	-79	-97
6		-99	-97	-92	-93	-91	-92	-98	-106	-110	-116	-105	-109	-75	-72	-115	-86	-86	-64	-75	-95	-94	-94	-93	-85	-93
7		-95	-103	-98	-97	-96	-100	-107	-119	-129	-136	-133	-125	-117	-107	-102	-89	-86	-88	-86	-78	-80	-87	-81	-81	-101
8	D	-80	-88	-114	-90	-147	-203	-237	-203	-169	-124	-117	-146	-79	15	-32	38	17	-53	-111	-156	-242	-264	-216	-226	-126
9	D	-209	-223	-105	-120	-114	-119	-116	-121	-141	-165	-135	-112	-104	-65	-88	-81	-73	-82	-80	-77	-127	-160	-127	-120	-119
10		-119	-107	-124	-129	-127	-141	-138	-134	-136	-129	-124	-123	-94	-87	-67	-89	-103	-100	-101	-99	-87	-104	-111	-109	-112
11		-114	-117	-112	-108	-108	-110	-113	-115	-120	-123	-118	-112	-107	-106	-100	-86	-86	-84	-92	-94	-94	-96	-99	-105	-105
12	Q	-102	-100	-100	-100	-102	-102	-106	-110	-119	-119	-110	-105	-106	-105	-110	-101	-92	-88	-83	-86	-87	-92	-95	-89	-100
13		-92	-93	-92	-93	-96	-101	-109	-118	-122	-121	-119	-100	-100	-93	-91	-88	-88	-75	-78	-81	-86	-90	-93	-93	-96
14		-100	-91	-93	-102	-113	-112	-111	-112	-117	-122	-125	-113	-107	-92	-106	-90	-83	-76	-71	-67	-76	-73	-89	-111	-98
15		-89	-89	-78	-87	-88	-90	-97	-105	-106	-111	-110	-118	-92	-78	-68	-109	-79	-79	-67	-81	-84	-83	-84	-83	-90
16		-85	-93	-92	-97	-87	-88	-102	-120	-118	-120	-135	-140	-104	-101	-85	-82	-75	-82	-95	-93	-89	-82	-81	-84	-97
17		-87	-85	-87	-90	-94	-102	-107	-123	-129	-112	-126	-112	-93	-105	-86	-80	-80	-69	-80	-82	-92	-93	-90	-107	-96
18		-93	-89	-89	-107	-109	-100	-102	-106	-121	-119	-107	-112	-102	-96	-94	-83	-79	-82	-80	-83	-84	-82	-81	-83	-95
19		-86	-83	-83	-86	-91	-95	-102	-115	-133	-135	-120	-108	-96	-117	-89	-86	-77	-77	-77	-85	-86	-86	-83	-82	-95
20		-79	-85	-82	-82	-81	-88	-104	-108	-113	-120	-123	-111	-98	-84	-84	-85	-80	-77	-77	-73	-71	-73	-71	-67	-88
21	D	-67	-68	-69	-80	-87	-90	-123	-155	-153	-125	-102	-107	-79	-104	-57	-93	-95	-79	-78	-88	-91	-91	-92	-90	-94
22		-87	-85	-85	-92	-99	-95	-105	-112	-133	-130	-111	-97	-93	-94	-80	-86	-92	-88	-83	-87	-87	-90	-89	-90	-95
23	Q	-88	-85	-83	-86	-89	-96	-104	-112	-122	-122	-114	-103	-100	-95	-88	-85	-83	-84	-86	-88	-87	-91	-91	-96	-94
24		-94	-90	-84	-89	-86	-94	-101	-105	-113	-111	-110	-125	-107	-95	-93	-88	-84	-83	-81	-80	-80	-83	-83	-85	-93
25	Q	-84	-82	-82	-88	-94	-101	-104	-111	-120	-119	-115	-107	-97	-88	-86	-87	-85	-84	-82	-83	-82	-83	-83	-83	-93
26	Q	-82	-81	-80	-83	-87	-88	-96	-107	-115	-121	-124	-111	-98	-88	-81	-81	-74	-76	-67	-60	-64	-66	-68	-68	-86
27		-73	-77	-91	-91	-95	-85	-91	-99	-111	-117	-119	-121	-107	-90	-82	-86	-71	-74	-63	-71	-80	-76	-82	-70	-88
28		-86	-81	-85	-90	-100	-104	-110	-124	-112	-108	-90	-110	-94	-98	-101	-88	-83	-76	-78	-80	-78	-91	-93	-98	-94
29		-95	-92	-100	-102	-93	-91	-91	-95	-107	-118	-115	-111	-102	-105	-92	-87	-83	-72	-65	-76	-79	-99	-110	-110	-95
30		-107	-87	-111	-110	-112	-113	-121	-128	-119	-116	-111	-112	-107	-100	-87	-75	-78	-79	-72	-75	-76	-84	-87	-89	-98
31		-89	-87	-90	-94	-101	-103	-109	-114	-126	-115	-109	-97	-93	-86	-76	-82	-92	-70	-57	-71	-80	-95	-106	-96	-93
All		-98	-95	-94	-98	-100	-105	-112	-119	-123	-123	-118	-114	-99	-91	-87	-83	-80	-79	-80	-87	-93	-98	-98	-97	-99
Quiet		-90	-89	-89	-91	-95	-100	-106	-113	-121	-123	-119	-111	-102	-94	-92	-92	-86	-83	-80	-81	-82	-83	-86	-85	-95
Dist.		-122	-115	-99	-105	-109	-125	-141	-144	-141	-132	-120	-119	-91	-66	-65	-53	-60	-75	-89	-115	-144	-158	-144	-138	-111

May 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	716	716	721	716	721	726	725	718	711	700	689	675	664	666	668	687	692	702	723	747	725	752	737	773	711
2	D	758	705	729	687	721	736	730	729	723	707	692	677	674	674	690	707	712	714	720	725	729	714	712	748	713
3		711	716	729	722	732	735	725	729	725	713	704	695	691	696	698	701	711	723	715	710	710	722	715	713	714
4	Q	719	722	724	727	726	726	725	724	714	705	694	687	687	691	696	701	706	713	709	706	707	709	710	710	710
5		714	716	718	720	720	719	716	715	708	697	678	675	680	682	693	698	702	719	711	705	707	708	708	720	705
6		738	729	731	733	734	734	734	729	714	703	681	669	654	671	663	675	700	695	715	747	722	711	707	718	709
7		702	719	726	735	739	739	737	728	717	702	688	676	674	686	693	708	726	719	710	710	712	712	726	709	712
8	D	720	695	680	677	699	708	663	739	718	701	692	665	658	669	688	666	699	722	743	745	756	761	725	784	707
9	D	848	739	709	738	737	742	739	732	724	703	695	693	685	714	698	711	720	717	719	713	703	737	734	715	727
10		718	725	731	718	712	725	708	714	714	703	694	691	692	701	696	702	703	706	709	710	728	728	721	712	711
11		710	707	716	727	737	742	738	732	722	712	701	693	693	698	701	708	710	713	714	718	718	718	725	713	715
12	Q	720	724	729	730	733	734	733	724	709	696	686	681	684	693	701	706	710	713	712	713	714	716	713	713	712
13		715	722	724	728	728	729	735	725	714	698	682	673	669	674	684	691	703	707	711	709	720	722	713	713	708
14		709	722	742	750	749	736	727	725	705	689	675	665	671	671	677	686	693	699	705	707	714	720	722	733	708
15		723	730	721	722	733	732	722	707	704	702	693	682	683	692	698	699	705	706	704	738	708	702	701	707	709
16		706	713	719	721	717	729	729	722	716	702	691	679	677	678	688	704	708	722	713	705	711	707	711	718	708
17		724	716	718	727	729	733	730	726	720	710	698	688	686	694	696	708	707	714	731	723	718	721	725	720	715
18		719	720	719	711	700	702	723	734	724	713	695	683	675	678	694	701	704	709	710	711	712	713	712	715	707
19		717	718	722	727	734	737	739	737	724	705	693	687	685	690	695	700	706	712	725	720	712	710	710	711	713
20		709	708	712	725	736	741	734	725	711	695	679	675	679	686	696	704	709	710	709	708	705	707	708	702	707
21	D	702	717	727	736	732	728	741	720	684	687	684	673	675	681	693	711	719	713	718	709	712	708	707	707	708
22		710	711	714	719	717	727	733	730	716	702	694	680	672	691	706	712	716	720	714	709	707	708	709	710	710
23	Q	712	715	721	728	736	739	739	734	723	710	699	693	693	695	702	710	715	716	715	715	713	714	715	710	715
24		705	713	724	727	738	740	741	736	723	710	698	691	691	692	696	702	708	712	711	710	711	710	711	711	713
25	Q	713	716	722	727	736	739	739	731	716	705	690	684	686	688	693	702	707	705	703	707	709	708	708	708	710
26	Q	708	713	723	732	737	743	743	738	727	711	698	688	680	683	692	701	706	707	704	700	698	707	704	707	710
27		713	717	718	725	734	730	732	735	729	715	693	677	667	670	679	686	691	693	698	716	709	706	714	719	707
28		740	749	744	739	736	731	735	740	718	711	698	685	675	673	686	690	698	707	714	705	705	711	702	703	712
29		714	720	727	732	732	737	741	740	732	715	706	698	694	696	698	702	709	708	705	706	723	741	736	751	719
30		724	750	749	731	729	733	741	736	729	722	710	703	700	696	692	696	702	710	703	706	712	713	714	708	717
31		711	723	728	731	726	729	736	741	728	712	698	683	683	684	686	693	701	698	717	705	708	737	755	736	715
All		721	719	723	725	729	732	730	729	717	705	693	683	680	685	691	699	706	710	713	715	716	718	716	720	711
Quiet		714	718	724	729	734	736	736	730	718	705	693	687	686	690	697	704	709	711	708	708	708	711	710	710	711
Dist.		749	715	713	711	722	728	726	728	712	700	690	677	671	681	687	696	708	714	725	731	737	734	723	745	711

Nurmijarvi Finland

June 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-99	-97	-102	-99	-95	-97	-107	-117	-119	-117	-120	-108	-102	-97	-83	-75	-79	-83	-84	-82	-82	-89	-88	-90	-96
2	Q	-90	-88	-89	-89	-99	-101	-105	-109	-115	-116	-110	-106	-101	-98	-97	-92	-88	-80	-78	-80	-84	-88	-90	-89	-95
3	Q	-87	-93	-92	-90	-90	-93	-101	-109	-112	-108	-110	-104	-104	-101	-95	-93	-91	-82	-78	-78	-78	-81	-85	-86	-93
4	Q	-88	-86	-83	-82	-82	-87	-100	-110	-115	-114	-111	-103	-94	-86	-82	-82	-79	-73	-68	-73	-79	-77	-77	-71	-88
5	D	-71	-69	-69	-76	-78	-83	-87	-94	-108	-107	-131	-98	-80	-57	-16	-59	-61	-66	-59	-79	-137	-104	-96	-107	-83
6		-159	-131	-112	-93	-132	-165	-125	-145	-135	-137	-120	-140	-105	-94	-77	-74	-69	-74	-75	-82	-87	-87	-88	-86	-108
7		-87	-90	-87	-90	-93	-96	-103	-112	-117	-127	-124	-122	-103	-82	-100	-85	-81	-86	-74	-83	-80	-96	-97	-109	-97
8		-105	-91	-102	-115	-106	-105	-109	-118	-125	-121	-114	-116	-100	-101	-101	-98	-92	-92	-90	-85	-86	-87	-89	-90	-102
9		-91	-98	-97	-97	-95	-94	-100	-113	-123	-127	-120	-111	-107	-94	-81	-79	-75	-77	-78	-84	-87	-87	-86	-96	-96
10		-86	-87	-86	-89	-90	-90	-96	-104	-114	-121	-116	-108	-98	-103	-77	-86	-76	-67	-63	-58	-65	-78	-72	-74	-88
11		-79	-90	-86	-88	-87	-88	-90	-97	-109	-120	-129	-129	-109	-89	-69	-76	-72	-75	-66	-75	-70	-70	-81	-86	-89
12		-81	-83	-86	-85	-85	-92	-104	-104	-108	-109	-107	-99	-82	-65	-74	-82	-76	-46	-74	-72	-75	-75	-80	-75	-84
13		-82	-75	-81	-92	-92	-87	-92	-102	-105	-111	-118	-112	-99	-92	-81	-83	-79	-78	-74	-79	-78	-87	-87	-84	-90
14	D	-83	-91	-96	-86	-89	-92	-99	-100	-100	-111	-107	-99	-88	-76	-80	-84	-72	-59	-42	-51	-75	-89	-86	-88	-85
15	D	-132	-142	-95	-98	-102	-98	-94	-106	-119	-125	-124	-127	-109	-101	-84	-80	-71	-79	-82	-80	-79	-80	-82	-81	-99
16		-82	-80	-81	-80	-84	-89	-98	-105	-110	-106	-98	-119	-102	-95	-75	-86	-87	-77	-83	-81	-78	-80	-83	-84	-89
17		-84	-82	-83	-85	-83	-94	-92	-104	-114	-130	-123	-103	-95	-77	-76	-82	-57	-81	-75	-80	-84	-83	-83	-88	-88
18		-85	-79	-81	-92	-96	-93	-100	-109	-113	-114	-121	-122	-110	-96	-79	-87	-83	-81	-81	-75	-76	-80	-83	-89	-93
19		-88	-85	-81	-85	-97	-107	-111	-114	-115	-119	-112	-107	-103	-91	-85	-85	-72	-79	-79	-78	-80	-80	-83	-85	-93
20	Q	-84	-83	-85	-84	-86	-92	-99	-105	-109	-110	-111	-110	-104	-101	-91	-81	-79	-83	-79	-82	-79	-83	-86	-87	-91
21	Q	-85	-83	-78	-81	-83	-92	-98	-106	-113	-114	-119	-116	-110	-95	-84	-82	-78	-75	-77	-79	-80	-84	-85	-85	-91
22		-86	-86	-84	-85	-89	-97	-106	-109	-111	-116	-109	-96	-101	-90	-85	-60	-48	-47	-57	-67	-65	-84	-85	-90	-85
23		-91	-88	-91	-104	-102	-86	-88	-96	-110	-111	-109	-112	-106	-99	-87	-75	-56	-55	-76	-71	-77	-80	-81	-91	-89
24	D	-105	-93	-115	-86	-98	-102	-119	-120	-127	-142	-138	-122	-117	-99	-87	-89	-64	-72	-77	-83	-87	-90	-97	-101	-101
25		-101	-98	-116	-102	-96	-88	-89	-101	-116	-126	-125	-122	-106	-88	-74	-71	-85	-86	-80	-71	-84	-82	-80	-84	-95
26		-98	-87	-87	-87	-90	-100	-107	-110	-112	-118	-123	-128	-104	-104	-89	-68	-74	-64	-70	-70	-71	-85	-92	-114	-94
27		-87	-91	-94	-103	-112	-102	-106	-123	-122	-127	-125	-120	-115	-106	-93	-85	-82	-79	-78	-78	-78	-82	-76	-85	-98
28		-88	-92	-92	-90	-100	-107	-120	-115	-116	-118	-116	-110	-121	-97	-96	-86	-75	-72	-70	-78	-82	-85	-87	-89	-96
29		-90	-93	-92	-96	-100	-103	-109	-112	-117	-115	-111	-103	-95	-83	-89	-83	-88	-83	-86	-77	-74	-86	-87	-88	-95
30		-89	-86	-85	-83	-87	-96	-102	-106	-108	-110	-104	-106	-94	-84	-82	-79	-86	-77	-53	-68	-83	-81	-87	-83	-88
All Quiet		-92	-91	-90	-90	-94	-97	-101	-109	-114	-118	-117	-113	-102	-92	-83	-81	-77	-73	-74	-75	-80	-84	-85	-88	-93
Dist.		-110	-105	-98	-88	-100	-108	-105	-113	-118	-124	-124	-117	-100	-85	-69	-77	-68	-70	-67	-75	-93	-90	-90	-93	-92

June 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		730	729	727	726	731	737	743	737	725	710	694	685	684	690	699	708	708	709	707	715	709	708	704	713	
2	Q	710	718	724	729	734	733	733	725	710	696	685	684	689	692	696	703	709	710	710	710	710	711	714	710	
3	Q	719	721	725	726	727	732	737	735	724	709	695	686	680	680	691	703	712	715	715	714	713	711	710	709	712
4	Q	716	723	727	732	735	740	744	739	730	719	702	692	687	689	696	705	708	712	712	716	712	709	712	713	715
5	D	718	721	727	737	730	732	735	733	722	709	688	667	659	652	650	658	680	686	706	653	716	758	717	741	704
6	D	715	727	745	755	750	726	721	724	721	722	704	695	705	693	695	712	713	710	703	709	709	711	716	719	717
7		718	721	735	743	743	743	747	742	728	710	693	685	680	682	693	698	705	709	715	716	708	715	733	735	717
8		727	725	733	732	724	730	735	733	723	704	685	678	678	680	687	693	704	710	713	712	712	712	713	711	
9		716	719	723	732	738	740	737	732	728	721	709	699	692	694	695	701	707	713	720	719	713	713	715	716	716
10		718	719	727	731	732	735	740	741	734	721	704	683	669	668	677	681	694	702	702	712	717	711	708	704	710
11		709	750	756	747	748	740	740	740	733	725	706	696	690	687	688	700	717	722	715	717	709	731	740	720	722
12		716	727	733	732	736	743	734	731	726	713	695	683	681	687	692	704	706	707	714	709	705	709	714	712	713
13		709	727	732	738	723	735	744	744	734	713	696	685	681	681	692	705	706	708	712	711	723	713	713	716	714
14	D	718	714	716	727	733	741	742	740	732	720	711	700	691	690	695	697	695	689	690	767	729	727	756	737	719
15	D	743	733	740	742	742	749	745	743	737	733	717	703	691	684	683	691	697	704	706	709	713	713	716	719	719
16		720	726	732	734	737	738	740	738	730	716	700	693	690	693	696	709	706	707	706	709	712	713	712	712	715
17		718	723	724	728	730	725	733	734	732	719	706	702	699	696	697	699	702	707	714	715	708	708	709	710	714
18		714	720	720	715	723	729	734	732	726	715	699	691	690	694	696	708	709	712	712	713	725	714	711	719	713
19		716	713	726	731	738	733	736	734	728	714	701	691	688	689	696	705	708	711	712	711	712	712	715	717	714
20	Q	721	726	730	732	733	735	735	732	729	722	709	699	694	697	698	702	710	712	713	713	712	709	715	719	716
21	Q	719	720	730	737	741	738	740	738	730	717	703	695	692	694	700	706	711	715	713	711	708	711	713	713	717
22		715	722	732	738	735	735	737	734	726	710	695	682	681	676	678	685	694	697	694	709	708	717	717	718	710
23		720	728	731	734	723	733	743	740	731	720	707	696	689	692	696	700	698	704	707	708	712	712	719	756	717
24	D	758	731	754	733	725	728	731	728	723	714	703	687	676	673	686	693	693	704	712	711	714	716	722	710	713
25		712	722	716	715	724	740	748	751	741	732	719	705	691	684	691	703	706	710	711	723	715	711	705	726	717
26		728	732	738	743	742	752	746	739	727	715	700	693	690	686	688	700	703	702	705	714	721	715	725	713	717
27		734	734	729	738	733	735	743	731	728	721	712	702	696	702	702	700	701	704	707	712	714	713	723	731	719
28		730	728	721	738	739	737	737	736	730	723	708	695	693	693	698	700	702	713	720	710	708	713	716	717	717
29		717	720	729	735	742	740	733	729	720	713	701	692	690	694	698	700	699	700	704	707	716	720	718	721	714
30		723	725	728	735	739	734	737	737	735	723	703	695	692	693	699	702	706	702	699	727	718	716	719	719	717
All Quiet Dist.		721	725	730	734	734	736	738	736	728	716	702	691	687	687	691	699	704	707	709	712	714	715	717	719	715
		717	721	727	731	734	736	738	733	725	713	699	691	689	690	692	704	710	713	713	711	710	712	713	714	714
		730	725	736	739	736	735	735	734	727	719	705	690	684	678	682	690	695	699	703	710	716	725	725	714	714

Nurmijarvi Finland

July 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-89	-76	-73	-84	-96	-101	-101	-112	-119	-126	-108	-110	-100	-98	-84	-83	-81	-81	-76	-79	-80	-83	-87	-88	-92
2		-88	-85	-86	-86	-90	-89	-92	-103	-109	-114	-109	-108	-100	-87	-84	-82	-82	-75	-61	-54	-52	-52	-59	-73	-84
3		-69	-73	-96	-85	-94	-97	-93	-97	-100	-116	-113	-110	-99	-88	-81	-76	-72	-73	-73	-77	-70	-82	-93	-83	-88
4		-89	-88	-88	-91	-93	-98	-108	-119	-117	-123	-124	-108	-89	-87	-85	-83	-82	-78	-80	-74	-74	-83	-88	-91	-93
5	Q	-89	-88	-90	-89	-92	-97	-101	-110	-119	-128	-129	-115	-106	-96	-85	-79	-78	-83	-86	-80	-79	-80	-85	-86	-95
6		-85	-85	-84	-85	-88	-97	-103	-109	-115	-126	-121	-116	-103	-89	-78	-73	-72	-70	-73	-69	-67	-65	-67	-72	-88
7	D	-69	-61	-69	-72	-85	-80	-92	-90	-102	-113	-112	-101	-98	-82	-102	-43	-37	-66	-64	-53	-68	-99	-103	-97	-82
8	D	-97	-93	-81	-77	-75	-77	-93	-113	-129	-138	-141	-129	-119	-77	-60	-80	-55	-61	-72	-66	-85	-83	-84	-85	-91
9		-85	-103	-98	-92	-95	-94	-104	-121	-131	-131	-133	-121	-96	-73	-75	-82	-81	-78	-83	-83	-85	-87	-88	-88	-96
10		-89	-85	-91	-90	-92	-98	-108	-118	-122	-120	-128	-111	-107	-111	-87	-81	-73	-80	-71	-82	-82	-81	-81	-93	-95
11		-95	-97	-96	-96	-96	-94	-88	-100	-117	-132	-130	-125	-129	-112	-80	-60	-68	-72	-75	-81	-84	-79	-91	-93	-96
12	D	-103	-106	-109	-108	-137	-94	-114	-123	-142	-157	-136	-129	-114	-104	-89	-80	-79	-67	-71	-74	-75	-79	-92	-100	-103
13		-105	-97	-91	-91	-95	-96	-102	-111	-118	-131	-120	-114	-110	-98	-96	-90	-84	-74	-74	-77	-79	-83	-76	-82	-96
14		-85	-87	-86	-93	-98	-100	-128	-111	-129	-154	-137	-113	-106	-91	-98	-77	-86	-76	-78	-78	-78	-84	-84	-90	-98
15		-96	-86	-84	-92	-98	-88	-97	-119	-129	-130	-140	-118	-112	-97	-91	-83	-70	-76	-81	-85	-87	-87	-86	-85	-97
16		-90	-97	-93	-83	-95	-106	-114	-116	-113	-111	-114	-103	-91	-101	-94	-89	-86	-81	-82	-73	-84	-88	-92	-93	-95
17		-96	-93	-94	-96	-93	-94	-101	-109	-112	-120	-127	-114	-109	-87	-82	-85	-80	-83	-78	-80	-80	-87	-89	-90	-95
18	Q	-90	-88	-86	-88	-93	-96	-105	-109	-115	-117	-112	-106	-104	-97	-90	-96	-89	-87	-84	-81	-83	-87	-91	-95	-95
19		-92	-92	-90	-89	-95	-97	-100	-103	-107	-114	-118	-115	-97	-76	-79	-85	-89	-89	-82	-81	-80	-78	-78	-72	-92
20	D	-38	-98	-93	-126	-104	-89	-75	-88	-106	-106	-113	-113	-106	-101	-93	-85	-75	-82	-89	-94	-89	-91	-93	-95	-93
21		-95	-89	-88	-89	-93	-99	-108	-119	-124	-132	-136	-131	-119	-106	-100	-82	-90	-91	-88	-89	-89	-91	-88	-92	-101
22		-95	-97	-91	-92	-97	-101	-101	-114	-116	-124	-134	-119	-100	-101	-78	-99	-60	-69	-89	-88	-87	-89	-93	-85	-97
23		-81	-72	-72	-78	-98	-102	-100	-107	-116	-113	-119	-116	-123	-121	-97	-86	-71	-71	-90	-100	-91	-91	-94	-96	-98
24		-96	-96	-96	-93	-95	-96	-94	-99	-106	-114	-115	-119	-103	-98	-88	-75	-38	-22	-46	-82	-83	-77	-85	-122	-89
25	D	-96	-74	-72	-109	-108	-118	-135	-129	-134	-132	-129	-141	-120	-89	-75	-97	-95	-95	-99	-99	-90	-92	-93	-97	-105
26	Q	-97	-96	-93	-92	-94	-95	-103	-113	-123	-134	-133	-127	-119	-103	-96	-99	-90	-85	-83	-83	-92	-100	-96	-96	-102
27	Q	-95	-93	-95	-95	-97	-98	-102	-106	-113	-120	-125	-121	-114	-104	-95	-87	-83	-80	-80	-77	-75	-77	-81	-77	-95
28		-81	-72	-72	-78	-98	-102	-100	-107	-116	-113	-119	-116	-123	-121	-97	-86	-71	-71	-90	-100	-91	-91	-94	-96	-98
29		-110	-104	-98	-103	-113	-106	-104	-108	-119	-138	-132	-113	-126	-107	-100	-83	-78	-73	-82	-85	-89	-93	-91	-95	-102
30		-101	-100	-93	-90	-94	-97	-98	-105	-114	-119	-124	-117	-102	-94	-93	-91	-84	-85	-81	-87	-88	-90	-91	-95	-97
31	Q	-95	-97	-91	-89	-93	-95	-101	-110	-116	-123	-124	-121	-113	-103	-88	-91	-85	-84	-82	-84	-86	-89	-91	-91	-98
All		-90	-90	-89	-91	-96	-97	-103	-110	-118	-125	-124	-117	-108	-96	-88	-83	-77	-76	-79	-80	-81	-84	-87	-90	-95
Quiet		-93	-92	-91	-91	-94	-96	-102	-110	-117	-124	-125	-118	-111	-101	-91	-90	-85	-84	-83	-81	-83	-87	-89	-89	-97
Dist.		-81	-86	-85	-98	-102	-91	-102	-108	-123	-129	-126	-123	-111	-91	-84	-77	-68	-74	-79	-77	-81	-89	-93	-95	-95

July 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		708	722	733	744	744	735	733	723	718	707	700	690	689	693	698	707	711	713	713	714	714	715	715	720	715	
2		724	724	730	734	732	740	739	735	732	718	700	693	687	686	693	695	698	699	695	696	697	705	726	731	713	
3		714	726	733	746	746	741	738	736	725	709	695	682	680	680	686	695	705	710	706	712	718	725	718	720	714	
4		734	729	735	731	736	746	749	737	729	720	707	701	697	695	697	705	710	712	713	712	734	724	725	728	721	
5	Q	728	730	735	741	746	747	744	743	733	716	704	693	685	685	692	703	714	720	717	714	714	721	717	718	719	
6		722	727	734	739	740	738	738	738	732	719	698	677	671	676	684	695	701	702	703	708	709	709	730	714	713	
7	D	713	721	732	732	730	722	730	739	737	724	707	693	678	665	666	681	688	712	715	713	714	747	752	766	718	
8	D	714	725	722	739	748	750	743	738	730	718	701	684	682	681	695	710	708	714	721	737	709	716	714	716	717	
9		722	701	720	744	751	755	754	745	735	724	706	697	690	704	709	709	713	720	727	709	708	713	719	722	721	
10		720	726	720	727	738	746	745	743	730	722	712	698	692	694	699	701	707	713	718	714	713	720	724	722	718	
11		730	737	744	739	731	730	753	757	750	739	723	712	701	701	697	699	708	719	718	716	714	730	732	721	725	
12	D	721	743	726	723	680	689	714	719	727	712	694	687	692	696	708	713	709	711	711	719	726	741	726	728	713	
13		704	709	736	744	744	752	752	749	744	734	723	714	707	705	705	700	707	710	712	714	715	716	715	720	722	
14		722	729	728	721	726	730	733	721	723	714	695	689	683	688	692	702	718	717	714	722	725	717	711	716	714	
15		708	721	718	718	726	738	744	741	737	729	716	706	696	697	701	707	716	725	720	717	716	715	717	726	719	
16		721	708	726	736	742	743	737	726	717	708	696	688	688	698	700	705	711	712	715	720	715	713	716	720	715	
17		722	725	726	725	731	737	746	740	732	718	705	694	689	692	701	710	720	721	715	711	710	714	717	720	718	
18	Q	726	731	736	742	746	743	742	732	717	711	712	710	703	699	707	717	722	719	716	714	713	712	715	714	721	
19		718	726	732	735	738	743	747	743	735	723	709	694	688	693	700	711	714	713	713	713	715	713	715	710	718	
20	D	709	763	766	788	788	752	766	765	740	719	708	697	681	675	676	691	701	711	720	724	723	722	723	724	726	
21		726	726	734	740	744	746	747	743	736	724	709	696	691	691	700	707	718	723	725	725	722	723	716	717	722	
22		724	728	736	745	755	757	752	742	731	716	700	686	681	685	685	707	712	716	736	734	717	714	712	720	720	
23		717	717	734	742	743	740	725	740	733	730	722	709	699	694	697	706	717	723	724	720	721	724	721	724	722	
24		728	733	744	751	752	748	749	743	735	725	714	704	693	688	692	695	688	719	738	720	717	731	728	728	723	
25	D	726	760	767	751	743	731	735	731	729	723	714	699	693	694	694	693	705	729	720	724	733	738	723	724	724	
26	Q	722	721	723	731	734	737	745	746	739	729	716	703	695	693	701	706	713	715	715	718	734	731	726	723	721	
27	Q	725	728	733	736	743	747	746	746	740	731	718	704	697	696	702	705	708	712	715	713	715	718	725	729	722	
28		729	742	750	754	758	733	732	737	728	719	706	693	683	695	696	696	698	709	751	751	731	723	736	734	724	
29		726	730	744	756	735	735	734	731	730	717	703	692	694	698	702	709	731	733	715	719	710	718	718	723	721	
30		724	705	728	740	743	744	741	740	734	724	709	701	703	707	714	720	719	722	728	722	719	718	721	724	723	
31	Q	719	734	739	746	748	746	745	743	738	724	710	699	695	701	709	718	720	721	722	718	718	721	722	724	724	
All		721	727	734	740	741	740	742	739	732	721	707	696	690	692	697	704	710	716	718	718	719	721	722	723	720	
Quiet		724	729	733	739	743	744	744	742	733	722	712	702	695	695	702	710	715	717	717	715	718	720	721	722	721	
Dist.		717	742	742	747	738	729	738	738	733	719	705	692	685	682	688	697	702	715	715	718	723	733	733	728	731	720

Nurmijärvi Finland

August 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	-90	-93	-92	-91	-96	-100	-105	-111	-119	-130	-126	-116	-108	-92	-82	-82	-81	-85	-88	-83	-84	-82	-85	-88	-96
2		-80	-88	-86	-88	-95	-93	-102	-100	-104	-106	-106	-97	-84	-79	-66	-78	-70	-78	-70	-66	-62	-59	-109	-131	-87
3	D	-92	-97	-69	-62	-73	-114	-129	-117	-115	-167	-153	-142	-89	-107	-111	-110	-95	-64	-97	-97	-90	-93	-84	-97	-103
4		-119	-99	-93	-95	-112	-122	-111	-127	-131	-148	-129	-118	-107	-91	-70	-66	-55	-91	-102	-101	-98	-93	-90	-93	-103
5	D	-94	-96	-93	-92	-101	-129	-130	-114	-123	-128	-120	-116	-107	-110	-92	-102	-95	-90	-91	-95	-88	-83	-112	-103	-104
6		-94	-108	-92	-95	-96	-100	-110	-122	-132	-125	-128	-103	-106	-98	-95	-91	-93	-94	-92	-89	-82	-88	-99	-99	-101
7		-127	-121	-90	-94	-96	-97	-105	-111	-119	-123	-125	-124	-107	-110	-90	-76	-91	-80	-81	-88	-91	-83	-83	-92	-100
8		-117	-104	-95	-97	-95	-100	-106	-116	-129	-135	-127	-120	-106	-78	-72	-43	-32	-73	-99	-95	-92	-92	-93	-94	-96
9		-94	-92	-96	-103	-104	-105	-112	-120	-130	-145	-141	-121	-94	-104	-94	-78	-85	-99	-96	-92	-94	-92	-95	-112	-104
10		-116	-92	-92	-102	-105	-110	-125	-127	-135	-137	-123	-127	-97	-104	-93	-87	-74	-88	-91	-86	-94	-117	-99	-104	-105
11		-103	-96	-92	-89	-93	-101	-113	-119	-125	-128	-130	-125	-109	-99	-92	-82	-63	-66	-88	-92	-98	-94	-89	-104	-100
12		-97	-104	-112	-93	-99	-109	-115	-121	-131	-143	-134	-121	-117	-104	-98	-92	-87	-89	-90	-89	-90	-96	-97	-96	-105
13		-96	-98	-95	-99	-100	-107	-116	-123	-128	-130	-120	-109	-93	-76	-76	-79	-88	-90	-90	-95	-96	-99	-101	-102	-100
14	Q	-99	-97	-91	-93	-97	-104	-111	-114	-117	-116	-114	-100	-108	-104	-90	-86	-85	-90	-90	-94	-91	-92	-90	-90	-98
15	Q	-90	-93	-94	-93	-97	-101	-106	-114	-118	-126	-118	-108	-101	-93	-87	-86	-91	-87	-90	-87	-86	-86	-91	-92	-97
16		-94	-94	-92	-91	-92	-96	-101	-108	-113	-121	-118	-112	-95	-90	-95	-98	-91	-88	-85	-78	-74	-81	-98	-92	-96
17		-85	-81	-84	-96	-99	-91	-93	-102	-112	-118	-117	-107	-112	-100	-85	-87	-90	-90	-83	-84	-90	-94	-102	-94	-96
18		-104	-101	-99	-99	-98	-101	-105	-108	-113	-121	-117	-113	-105	-95	-96	-88	-88	-89	-85	-89	-91	-93	-99	-94	-100
19		-95	-96	-96	-96	-98	-102	-109	-119	-133	-131	-117	-106	-100	-97	-90	-90	-99	-92	-94	-92	-90	-89	-90	-88	-100
20		-87	-95	-90	-98	-97	-99	-110	-122	-120	-114	-110	-112	-103	-103	-95	-93	-92	-93	-89	-87	-87	-88	-92	-93	-99
21		-94	-94	-94	-94	-96	-96	-98	-104	-108	-112	-99	-97	-91	-84	-68	-83	-94	-76	-83	-78	-76	-76	-94	-95	-91
22	Q	-91	-95	-94	-97	-101	-102	-108	-115	-119	-123	-118	-111	-107	-101	-92	-91	-86	-89	-90	-88	-87	-89	-92	-98	-99
23	D	-100	-96	-94	-98	-91	-89	-94	-103	-117	-123	-120	-99	-93	-101	-88	-122	-85	-76	-97	-164	-183	-199	-139	-98	-111
24	D	-125	-141	-130	-104	-103	-120	-128	-129	-134	-133	-144	-136	-138	-119	-101	-105	-102	-111	-102	-97	-103	-84	-101	-106	-117
25		-108	-107	-103	-100	-105	-110	-117	-134	-155	-151	-125	-118	-117	-96	-106	-90	-93	-80	-81	-96	-92	-94	-82	-104	-107
26		-110	-95	-97	-99	-99	-106	-113	-121	-122	-120	-112	-107	-104	-103	-96	-97	-106	-92	-91	-94	-88	-97	-98	-91	-102
27		-97	-101	-100	-99	-102	-103	-104	-111	-120	-122	-112	-117	-102	-92	-91	-92	-95	-93	-92	-95	-94	-93	-93	-94	-101
28	Q	-94	-94	-96	-96	-98	-102	-110	-114	-117	-119	-110	-106	-106	-101	-96	-96	-96	-94	-93	-93	-89	-84	-85	-83	-99
29		-87	-89	-88	-92	-95	-97	-101	-109	-121	-125	-112	-102	-98	-98	-96	-104	-91	-90	-89	-89	-85	-78	-86	-84	-96
30	D	-86	-95	-98	-89	-89	-93	-93	-113	-127	-127	-135	-118	-113	-103	-78	-107	-99	-105	-97	-111	-107	-101	-119	-89	-104
31		-93	-96	-97	-95	-97	-103	-108	-115	-123	-134	-128	-123	-114	-105	-97	-90	-91	-87	-88	-86	-100	-103	-109	-112	-104
All		-99	-98	-95	-95	-97	-103	-109	-116	-123	-128	-122	-114	-104	-98	-90	-89	-86	-87	-90	-92	-93	-93	-97	-97	-101
Quiet		-93	-94	-93	-94	-98	-102	-108	-114	-118	-123	-117	-108	-106	-98	-90	-88	-88	-89	-90	-89	-87	-87	-89	-90	-98
Dist.		-100	-105	-97	-89	-91	-109	-115	-123	-135	-134	-122	-108	-108	-94	-109	-95	-89	-97	-113	-114	-112	-111	-99	-108	-108

August 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	Q	724	727	728	737	742	742	745	743	735	720	709	695	689	696	706	715	717	717	716	714	714	717	724	724	721
2		724	729	734	740	741	742	742	734	726	713	695	679	675	681	686	694	700	708	711	711	708	700	750	791	717
3	D	765	681	723	739	750	725	693	695	730	734	709	689	697	695	711	706	719	702	741	730	724	725	733	728	721
4		698	721	729	745	739	736	738	731	725	714	703	692	701	714	704	734	738	724	755	743	729	715	715	713	723
5	D	719	728	736	742	741	732	709	719	717	718	707	701	696	711	707	715	728	728	720	723	724	745	744	713	722
6		727	723	729	736	744	747	742	742	726	720	704	696	701	703	706	718	738	724	717	722	728	733	736	735	725
7		712	684	734	742	746	749	754	749	739	726	709	698	695	699	710	715	731	728	717	719	717	715	734	732	723
8		714	703	731	736	735	746	753	750	738	721	707	694	692	695	702	712	747	736	719	715	714	716	720	724	722
9		729	731	732	735	734	749	757	754	742	725	700	698	693	695	700	731	739	722	713	710	715	727	753	748	726
10		698	723	737	739	735	744	739	734	721	708	690	693	695	703	717	739	741	722	723	723	716	726	721	714	721
11		732	736	739	743	747	749	748	744	735	722	707	695	693	692	705	712	723	738	740	726	724	721	727	731	726
12		737	730	702	744	739	743	747	746	740	727	716	702	702	719	722	721	718	715	720	715	715	721	722	724	724
13		729	733	738	739	741	739	735	729	722	711	700	692	696	711	710	713	717	717	728	716	715	716	720	722	720
14	Q	727	726	731	737	740	742	738	731	721	713	705	697	697	705	708	714	718	716	717	719	720	721	720	722	720
15	Q	721	728	734	737	738	737	738	733	722	712	704	702	704	710	718	720	722	718	716	717	717	728	725	721	722
16		723	723	732	739	739	735	731	728	725	715	703	695	691	697	702	711	720	716	712	712	721	727	740	743	720
17		745	734	743	752	735	728	730	733	728	716	702	691	693	700	710	719	723	721	717	717	728	736	738	736	724
18		742	739	747	734	738	746	745	735	728	718	706	697	691	696	698	711	723	722	722	721	721	732	727	729	724
19		730	730	732	736	740	743	743	739	726	715	713	703	698	706	711	715	727	723	725	721	719	717	720	722	723
20		733	733	737	742	745	751	749	737	729	722	705	697	695	697	704	713	719	720	720	721	724	726	729	724	724
21		729	730	733	736	740	745	748	744	732	712	697	686	685	689	687	694	702	708	715	718	716	740	752	726	719
22	Q	730	732	735	741	740	743	742	736	725	718	705	697	693	699	706	714	718	719	721	728	723	731	738	739	724
23	D	738	739	742	736	734	739	742	742	733	719	703	679	677	673	675	686	692	710	717	742	757	771	785	732	724
24	D	741	748	703	755	759	754	746	740	727	711	695	687	687	703	714	722	730	724	722	721	724	725	728	732	725
25		762	726	736	745	747	747	748	742	727	712	709	700	704	711	722	726	725	743	728	725	732	732	760	756	730
26		734	752	759	741	741	745	745	742	732	718	704	699	698	701	707	714	717	722	733	722	722	736	718	726	727
27		734	735	732	738	747	745	740	736	724	717	710	706	706	706	710	715	720	719	720	721	724	724	725	726	724
28	Q	730	730	731	736	740	740	738	732	723	714	706	705	708	713	716	718	716	716	718	720	720	720	722	723	722
29		726	729	729	735	738	741	742	738	728	715	696	688	690	700	708	718	722	723	735	725	730	742	722	720	723
30	D	722	720	713	733	742	744	742	735	727	717	701	688	681	686	698	697	712	723	758	765	736	764	703	725	722
31		733	736	739	740	743	745	748	741	736	721	703	694	695	702	713	718	723	722	719	724	736	734	744	754	728
All		729	727	732	740	741	742	740	737	729	717	704	695	694	700	706	714	722	723	724	723	723	728	732	731	723
Quiet		726	729	723	737	740	741	740	735	725	715	706	699	698	704	711	716	718	717	718	719	719	724	726	726	722
Dist.		737	723	723	741	745	739	726	726	727	720	703	689	688	694	701	705	716	729	732	737	733	746	739	726	723

Nurmijärvi Finland

September 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-104	-120	-91	-90	-91	-108	-135	-148	-143	-147	-136	-112	-101	-107	-111	-117	-102	-89	-92	-88	-79	-149	-154	-179	-116
2	D	-128	-123	-148	-119	-148	-158	-113	-130	-136	-138	-138	-124	-100	-79	-78	-80	-90	-109	-113	-107	-102	-154	-135	-116	-119
3	D	-111	-129	-120	-104	-145	-118	-120	-143	-143	-150	-153	-147	-101	-64	-84	-67	-80	-97	-121	-122	-148	-157	-153	-162	-122
4		-127	-128	-105	-100	-109	-115	-125	-120	-141	-142	-137	-114	-116	-102	-106	-107	-104	-77	-99	-103	-77	-123	-130	-99	-113
5		-118	-116	-114	-108	-110	-124	-117	-118	-130	-137	-140	-131	-118	-104	-103	-93	-95	-105	-117	-125	-119	-106	-103	-97	-115
6		-107	-108	-113	-123	-112	-107	-117	-130	-137	-127	-124	-124	-114	-109	-110	-103	-99	-100	-100	-80	-91	-106	-101	-106	-110
7		-97	-104	-109	-115	-101	-98	-103	-108	-117	-122	-118	-125	-129	-118	-92	-93	-104	-116	-108	-105	-102	-102	-100	-102	-108
8		-107	-102	-109	-99	-105	-112	-105	-112	-125	-130	-130	-134	-127	-108	-104	-98	-111	-105	-93	-103	-101	-102	-98	-101	-109
9		-101	-101	-100	-100	-101	-102	-104	-111	-118	-121	-119	-117	-112	-108	-104	-99	-97	-98	-96	-98	-98	-94	-95	-88	-103
10	Q	-96	-98	-96	-95	-93	-95	-94	-101	-110	-119	-128	-126	-117	-106	-99	-97	-97	-96	-95	-96	-97	-99	-103	-93	-102
11	Q	-99	-100	-99	-96	-94	-95	-99	-109	-112	-116	-115	-113	-114	-111	-102	-95	-102	-101	-102	-101	-108	-107	-103	-101	-104
12		-102	-95	-92	-91	-92	-93	-103	-109	-117	-120	-117	-114	-107	-105	-103	-99	-97	-94	-93	-91	-91	-96	-99	-97	-101
13		-96	-89	-94	-92	-89	-90	-101	-115	-124	-130	-126	-115	-104	-102	-99	-96	-96	-95	-97	-95	-94	-94	-101	-101	-101
14		-101	-105	-109	-98	-94	-97	-107	-107	-115	-121	-115	-116	-102	-103	-108	-110	-116	-101	-89	-97	-126	-129	-127	-124	-109
15		-118	-117	-108	-92	-89	-93	-99	-112	-116	-123	-121	-118	-108	-103	-103	-102	-101	-97	-92	-91	-91	-92	-92	-96	-103
16	Q	-98	-99	-99	-100	-102	-104	-109	-112	-116	-119	-121	-114	-108	-103	-99	-91	-89	-94	-91	-98	-98	-99	-98	-100	-103
17	Q	-99	-95	-93	-92	-91	-93	-100	-108	-114	-109	-112	-104	-97	-92	-91	-92	-90	-90	-90	-91	-87	-92	-92	-96	
18		-96	-91	-95	-93	-93	-98	-106	-108	-110	-111	-124	-123	-109	-97	-99	-111	-112	-103	-106	-99	-93	-92	-87	-95	-102
19		-98	-95	-99	-101	-100	-99	-104	-112	-129	-131	-123	-107	-101	-91	-111	-109	-106	-90	-87	-86	-81	-76	-87	-91	-101
20		-94	-124	-104	-113	-118	-118	-124	-138	-136	-116	-129	-112	-112	-109	-107	-108	-108	-102	-99	-97	-86	-94	-96	-102	-110
21		-103	-102	-104	-99	-102	-104	-111	-117	-120	-139	-123	-113	-110	-109	-107	-101	-98	-94	-95	-91	-91	-91	-90	-92	-104
22		-92	-100	-98	-100	-98	-98	-102	-112	-121	-123	-124	-117	-110	-108	-103	-100	-98	-95	-95	-95	-94	-94	-94	-95	-103
23		-96	-96	-96	-96	-95	-94	-99	-106	-113	-119	-122	-117	-108	-99	-96	-93	-90	-91	-89	-88	-88	-89	-90	-90	-98
24	Q	-92	-93	-93	-93	-95	-97	-97	-103	-112	-117	-117	-112	-102	-92	-95	-92	-93	-88	-86	-98	-113	-106	-118	-108	-100
25		-107	-103	-100	-113	-89	-103	-111	-120	-128	-124	-115	-122	-139	-111	-105	-106	-103	-88	-110	-120	-128	-118	-116	-100	-112
26		-109	-112	-105	-113	-105	-103	-106	-123	-121	-118	-115	-109	-115	-116	-117	-118	-123	-130	-129	-132	-127	-115	-102	-132	-116
27	D	-116	-151	-152	-105	-101	-108	-111	-120	-142	-141	-134	-114	-134	-122	-102	-77	-123	-109	-105	-108	-103	-104	-116	-125	-117
28	D	-138	-118	-156	-128	-111	-102	-112	-133	-135	-129	-137	-139	-121	-109	-121	-102	-107	-131	-104	-153	-165	-120	-122	-126	-126
29	D	-112	-115	-139	-119	-123	-121	-128	-180	-178	-180	-132	-136	-116	-97	-107	-128	-127	-129	-97	-119	-114	-106	-101	-103	-125
30		-131	-135	-113	-105	-117	-116	-129	-128	-128	-146	-138	-127	-121	-113	-109	-121	-112	-131	-107	-125	-126	-139	-133	-132	-124
All Quiet		-106	-109	-108	-103	-104	-105	-110	-120	-126	-129	-126	-120	-113	-103	-102	-100	-102	-101	-100	-103	-104	-108	-108	-108	-109
Dist.		-121	-127	-143	-115	-125	-121	-117	-141	-147	-148	-139	-131	-115	-94	-99	-91	-105	-115	-108	-122	-126	-128	-125	-126	-100

September 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		744	722	720	750	732	719	728	729	715	704	705	705	695	700	720	730	723	722	733	786	803	804	774	733	733	
2	D	783	711	750	738	739	706	738	729	732	718	702	688	682	683	756	756	731	761	728	721	733	714	754	749	729	
3	D	718	712	741	726	700	704	727	728	731	717	703	699	699	747	710	756	740	768	741	744	757	762	750	723	729	
4		746	735	719	737	732	725	733	745	734	723	713	705	702	725	719	724	729	768	740	730	790	741	726	721	732	
5		724	719	728	734	731	726	740	739	732	720	709	700	702	708	716	725	743	783	758	764	738	736	734	739	731	
6		732	734	731	729	736	745	744	744	732	728	715	706	715	712	718	726	733	741	729	736	719	738	731	728	729	
7		725	737	730	719	735	736	742	744	741	732	715	706	706	701	704	726	740	728	725	727	724	727	728	726	726	
8		707	723	728	731	741	725	730	732	725	720	716	712	710	708	695	697	708	715	727	748	733	729	725	731	730	722
9		725	728	730	735	736	737	737	739	739	733	724	715	709	708	711	716	727	731	724	726	726	726	730	727	727	
10	Q	730	730	733	731	732	731	739	745	743	735	724	713	706	706	712	720	724	725	726	727	732	736	734	730	728	
11	Q	729	728	729	732	735	741	745	743	736	725	715	707	705	709	720	729	725	727	726	728	735	739	737	733	728	
12		729	744	741	737	734	736	738	739	735	726	709	700	696	700	708	714	719	722	724	727	728	735	740	733	726	
13		729	731	741	732	731	737	743	745	736	720	704	695	690	696	706	717	724	725	722	723	727	738	735	741	725	
14		738	741	741	740	742	745	748	747	740	730	716	704	691	684	696	702	710	716	760	778	761	770	768	771	735	
15		779	770	757	740	729	719	719	722	718	710	703	700	702	705	712	717	719	719	722	723	726	732	729	727	725	
16	Q	729	730	731	733	734	738	740	740	735	724	713	707	706	708	713	717	720	719	723	725	727	730	731	732	725	
17	Q	736	739	742	737	737	740	744	741	732	720	713	707	706	708	715	719	719	721	723	724	726	729	732	734	727	
18		735	736	736	734	737	744	741	741	734	718	707	700	702	701	702	715	716	720	728	729	726	729	735	738	725	
19		733	732	736	737	736	738	739	738	730	707	691	680	681	667	667	676	701	706	708	711	721	726	739	742	714	
20		748	735	779	765	745	747	749	742	725	719	715	719	715	713	714	713	718	738	721	726	729	731	738	739	733	
21		725	734	746	742	738	738	737	738	734	732	726	716	709	711	713	716	719	721	725	724	727	729	731	737	728	
22		742	744	739	735	734	734	737	737	732	727	722	717	713	714	715	716	719	722	724	726	727	729	730	730	728	
23	Q	730	731	731	733	733	737	741	742	738	730	724	715	708	707	710	715	718	720	722	724	726	727	729	730	726	
24		730	731	731	732	734	737	740	738	733	727	717	710	705	703	708	713	714	715	716	724	739	751	769	753	728	
25		744	764	800	762	722	731	736	735	728	715	696	693	708	712	718	721	723	718	731	743	817	759	746	715	735	
26		738	769	762	744	726	718	723	725	724	722	711	702	717	717	696	708	724	724	767	770	782	750	735	744	733	
27	D	757	769	733	719	735	739	741	734	730	729	730	709	710	731	712	799	714	720	749	761	733	740	738	715	735	
28	D	732	718	710	716	729	730	733	733	729	727	725	727	712	747	726	816	777	760	809	758	741	774	756	722	742	
29	D	734	741	711	684	679	711	728	720	715	714	733	730	722	740	740	821	764	737	774	752	737	763	727	718	732	
30		738	722	729	627	733	729	727	739	734	725	728	714	720	722	743	748	747	773	808	757	773	762	756	753	742	
All Quiet Dist.		736	735	738	734	731	731	737	737	731	723	714	707	704	709	713	729	727	733	738	737	742	741	740	734	729	
		731	732	733	733	734	738	742	742	737	727	718	710	706	708	714	720	721	722	724	725	729	732	732	732	727	
		745	730	729	717	716	718	733	729	727	721	719	711	705	729	729	790	745	749	760	747	740	744	745	725	733	

Nurmijarvi Finland

October 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		-119	-114	-109	-109	-133	-118	-115	-123	-133	-131	-130	-127	-119	-118	-112	-108	-101	-77	-115	-129	-111	-107	-108	-93	-115	
2		-118	-106	-108	-107	-100	-101	-107	-113	-126	-137	-138	-129	-126	-132	-117	-112	-107	-107	-102	-111	-96	-129	-109	-107	-114	
3		-105	-103	-102	-102	-103	-119	-124	-116	-124	-128	-130	-127	-118	-119	-106	-103	-91	-106	-92	-113	-116	-112	-105	-105	-111	
4		-105	-105	-110	-101	-111	-107	-104	-116	-142	-158	-147	-125	-113	-125	-100	-102	-101	-106	-109	-89	-106	-112	-113	-108	-113	
5		-109	-114	-116	-98	-100	-95	-103	-119	-121	-133	-132	-128	-121	-117	-113	-109	-104	-105	-102	-95	-102	-98	-92	-104	-110	
6		-104	-106	-106	-103	-100	-99	-102	-110	-119	-127	-128	-124	-117	-109	-104	-98	-107	-115	-110	-103	-100	-93	-98	-100	-107	
7		-105	-113	-101	-106	-103	-99	-101	-111	-124	-131	-131	-124	-115	-109	-107	-108	-107	-109	-112	-112	-99	-100	-99	-101	-109	
8		-103	-100	-98	-97	-99	-101	-102	-108	-119	-129	-135	-130	-126	-119	-110	-106	-105	-106	-109	-105	-101	-93	-98	-102	-108	
9	Q	-97	-103	-103	-100	-94	-93	-101	-110	-120	-126	-126	-123	-119	-115	-120	-113	-109	-102	-99	-98	-100	-97	-95	-99	-107	
10		-98	-105	-95	-96	-97	-92	-99	-111	-123	-124	-124	-125	-120	-118	-114	-111	-112	-117	-122	-110	-103	-101	-100	-102	-109	
11	Q	-102	-103	-101	-99	-97	-96	-99	-107	-113	-120	-126	-121	-114	-109	-103	-102	-99	-97	-96	-95	-96	-96	-98	-99	-104	
12		-97	-97	-100	-97	-96	-96	-100	-107	-118	-125	-125	-123	-115	-106	-101	-100	-100	-100	-99	-99	-92	-94	-82	-89	-102	
13	D	-93	-96	-89	-92	-94	-88	-94	-133	-142	-141	-123	-122	-105	-101	-105	-21	4	-35	-183	-233	-236	-241	-253	-225	-127	
14		-151	-229	-156	-145	-132	-133	-143	-133	-142	-133	-131	-127	-126	-127	-120	-123	-123	-109	-106	-103	-99	-103	-103	-103	-129	
15		-104	-112	-114	-100	-104	-106	-109	-117	-127	-129	-126	-120	-118	-108	-108	-106	-100	-112	-111	-109	-113	-109	-109	-108	-112	
16		-104	-110	-107	-109	-105	-106	-111	-115	-124	-140	-127	-113	-112	-103	-115	-111	-105	-104	-77	-103	-120	-87	-106	-105	-109	
17		-114	-109	-106	-106	-111	-118	-123	-133	-148	-128	-126	-112	-111	-108	-113	-115	-104	-108	-109	-92	-85	-118	-133	-118	-114	
18		-110	-110	-113	-115	-113	-112	-117	-134	-134	-133	-126	-113	-106	-102	-108	-111	-106	-107	-105	-102	-103	-99	-109	-108	-112	
19		-102	-102	-102	-105	-103	-104	-103	-114	-124	-126	-127	-121	-108	-106	-106	-107	-110	-104	-103	-101	-97	-102	-103	-103	-108	
20	Q	-102	-104	-105	-103	-101	-101	-103	-111	-122	-127	-122	-115	-110	-106	-103	-101	-100	-99	-98	-100	-94	-97	-97	-98	-105	
21	Q	-98	-99	-99	-99	-98	-98	-103	-112	-121	-123	-120	-115	-110	-104	-101	-100	-99	-98	-97	-97	-97	-97	-96	-98	-103	
22	Q	-101	-101	-96	-96	-95	-93	-97	-103	-111	-112	-114	-109	-102	-102	-104	-113	-102	-97	-99	-94	-98	-93	-94	-97	-101	
23		-97	-99	-98	-95	-92	-86	-92	-107	-116	-118	-120	-120	-118	-118	-114	-112	-108	-101	-98	-110	-105	-101	-113	-107	-106	
24		-105	-117	-113	-91	-104	-102	-105	-116	-116	-117	-119	-107	-118	-135	-123	-119	-140	-128	-111	-112	-114	-120	-129	-150	-117	
25	D	-125	-126	-157	-82	-110	-106	-105	-111	-130	-125	-130	-128	-105	37	-129	-139	-138	-82	-150	-159	-147	-216	-231	-106	-125	
26	D	-136	-135	-160	-150	-118	-118	-128	-129	-137	-129	-158	-124	-119	-121	-149	-136	-147	-123	-147	-172	-177	-129	-129	-162	-139	
27	D	-144	-112	-136	-140	-115	-113	-126	-121	-139	-142	-142	-132	-127	-123	-126	-133	-117	-139	-138	-130	-113	-120	-145	-137	-130	
28		-121	-127	-125	-120	-116	-112	-113	-130	-144	-142	-135	-130	-123	-112	-118	-112	-122	-103	-114	-111	-123	-146	-165	-157	-126	
29	D	-134	-138	-97	-124	-122	-123	-134	-137	-134	-128	-141	-140	-115	-105	-121	-126	-129	-128	-139	-142	-128	-118	-121	-122	-127	
30		-116	-129	-144	-110	-118	-107	-114	-123	-138	-134	-131	-134	-134	-134	-125	-127	-118	-118	-134	-128	-117	-103	-117	-112	-114	-123
31		-115	-121	-111	-103	-101	-113	-107	-113	-122	-124	-122	-115	-115	-115	-113	-116	-122	-118	-104	-114	-111	-110	-110	-114	-114	
All		-111	-114	-112	-106	-106	-105	-109	-117	-128	-130	-129	-123	-116	-109	-113	-109	-107	-106	-112	-115	-112	-115	-118	-114	-114	
Quiet		-100	-102	-101	-99	-97	-96	-101	-109	-118	-122	-121	-116	-111	-107	-106	-106	-102	-98	-98	-97	-97	-96	-96	-98	-104	
Dist.		-126	-122	-128	-118	-112	-109	-117	-126	-137	-133	-139	-129	-114	-83	-126	-111	-106	-101	-151	-167	-160	-165	-176	-150	-129	

October 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		727	727	736	741	728	720	733	736	742	725	722	724	721	720	729	729	740	778	810	770	741	735	733	718	737
2		722	726	749	736	728	724	735	734	732	721	716	714	713	742	718	724	729	759	736	744	778	763	730	732	734
3		731	733	735	734	733	730	713	724	729	729	722	718	711	721	725	729	753	733	760	741	743	729	734	734	731
4		748	751	748	751	728	706	731	729	727	731	720	716	718	717	718	721	725	723	734	779	746	747	746	711	732
5		734	741	730	710	726	729	733	738	736	739	725	718	710	715	717	731	728	724	726	745	733	732	732	737	729
6		726	730	729	732	733	735	737	743	741	736	727	721	716	715	719	722	730	732	734	739	736	735	740	732	731
7		731	723	731	731	733	738	743	744	742	732	723	714	708	710	717	726	725	722	733	738	738	733	736	735	729
8		728	714	724	726	730	714	724	737	745	737	732	722	714	716	721	726	729	735	742	735	738	736	737	731	729
9	Q	733	737	733	732	733	734	739	740	742	731	715	707	709	710	724	718	725	729	730	750	736	731	729	736	729
10		726	718	739	735	734	737	744	742	746	737	722	711	703	702	711	723	724	740	774	747	750	741	733	733	732
11	Q	732	732	731	732	734	738	744	749	745	734	724	714	711	714	719	723	725	726	728	728	730	730	731	731	729
12		734	736	733	732	732	734	740	747	747	739	724	715	711	714	721	725	726	728	730	731	735	734	722	734	730
13	D	739	737	738	739	741	741	733	740	735	722	711	711	717	719	727	728	655	682	763	852	803	803	907	749	749
14		756	640	703	688	714	722	709	727	731	734	744	728	729	735	736	734	734	734	731	730	729	734	736	725	725
15		737	743	736	742	742	740	740	741	735	718	712	708	717	714	727	729	716	729	726	728	746	745	752	729	731
16		743	747	744	737	734	733	735	733	730	725	714	711	712	704	719	733	726	724	819	776	749	733	728	747	736
17		742	733	735	740	742	728	732	733	725	721	709	723	722	719	729	757	750	739	728	768	760	734	704	733	728
18		738	735	734	730	723	728	727	728	725	720	710	713	711	717	723	724	728	733	735	738	742	738	737	728	728
19		724	738	736	735	733	734	735	739	737	734	725	722	719	721	727	728	727	729	736	739	740	735	733	733	731
20	Q	733	735	733	735	737	737	740	744	741	734	723	717	717	721	725	725	727	728	728	732	740	736	734	733	731
21	Q	733	733	733	733	732	734	739	742	737	728	721	717	717	717	722	726	727	728	729	730	731	732	733	734	730
22	Q	736	733	735	737	736	737	739	740	736	727	718	715	716	718	721	726	729	728	727	746	738	752	739	737	732
23		732	734	731	732	733	734	739	738	738	729	720	715	715	719	727	725	725	745	745	741	741	729	741	733	733
24		749	746	719	751	741	728	735	732	724	714	709	707	712	706	721	705	732	738	724	731	750	757	781	752	732
25	D	743	745	713	737	749	731	722	722	726	718	704	721	689	770	738	706	737	959	886	809	698	728	737	772	747
26	D	763	737	727	690	691	711	729	737	740	742	768	741	730	727	774	785	796	826	755	759	736	785	755	728	747
27	D	709	747	739	706	710	730	735	743	740	738	737	736	718	731	739	768	788	791	754	754	797	784	789	755	747
28		745	738	735	738	735	737	734	735	726	725	723	721	719	736	737	741	741	747	735	762	765	793	790	763	743
29	D	786	763	699	744	718	720	705	713	728	724	724	722	747	734	725	753	754	756	779	777	771	748	734	739	739
30		733	731	700	721	727	739	746	741	734	730	724	731	722	738	761	730	732	764	763	756	752	750	733	729	737
31		726	710	721	733	733	734	734	732	730	730	727	721	721	734	735	746	743	739	743	749	746	741	743	737	734
All		737	732	730	731	730	730	733	736	735	729	722	719	715	722	727	729	733	747	746	751	749	747	744	741	734
Quist.		733	734	733	734	734	736	740	743	740	731	720	714	714	717	723	724	727	728	728	737	735	736	733	734	730
Dist.		748	745	723	723	722	726	725	731	734	729	728	727	715	739	742	742	746	802	663	791	776	774	772	779	746

Nurmijarvi Finland

November 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		-113	-117	-113	-104	-105	-105	-102	-106	-119	-124	-126	-130	-120	-128	-145	-133	-121	-112	-107	-104	-106	-104	-106	-116	-115	
2		-129	-119	-109	-110	-108	-109	-107	-106	-109	-115	-117	-109	-117	-128	-124	-121	-118	-121	-118	-109	-109	-112	-140	-141	-117	
3	D	-117	-115	-115	-107	-104	-103	-112	-120	-135	-137	-131	-130	-123	-121	-122	-128	-123	-129	-129	-127	-121	-120	-105	-91	-119	
4		-111	-122	-114	-113	-107	-101	-103	-110	-116	-124	-122	-115	-111	-108	-107	-107	-105	-104	-104	-105	-104	-108	-106	-106	-110	
5	Q	-104	-106	-104	-104	-102	-99	-98	-105	-112	-113	-112	-114	-108	-104	-102	-102	-101	-100	-100	-100	-100	-100	-100	-101	-104	
6		-99	-100	-102	-99	-94	-93	-94	-103	-114	-118	-119	-115	-117	-109	-107	-109	-106	-106	-109	-110	-103	-100	-108	-106	-106	
7		-101	-103	-102	-99	-97	-96	-95	-98	-111	-120	-116	-111	-105	-100	-99	-101	-100	-99	-100	-99	-99	-100	-101	-101	-102	
8	Q	-102	-104	-104	-102	-99	-98	-98	-105	-113	-116	-114	-112	-109	-109	-113	-104	-100	-99	-98	-97	-98	-99	-99	-98	-104	
9		-103	-103	-100	-99	-97	-96	-94	-91	-96	-108	-116	-119	-112	-109	-110	-110	-99	-99	-99	-92	-86	-105	-101	-101	-102	
10		-103	-103	-101	-95	-96	-94	-97	-101	-108	-115	-121	-120	-116	-105	-101	-48	-61	-89	-128	-122	-124	-130	-132	-119	-105	
11		-137	-129	-118	-113	-112	-114	-115	-115	-116	-113	-117	-113	-109	-105	-105	-103	-102	-110	-104	-105	-103	-107	-103	-94	-111	
12	D	-104	-107	-105	-103	-105	-112	-100	-98	-103	-111	-111	-121	-124	-111	-111	-120	-114	-107	-118	-125	-123				(-111)	
13	D																									(-14900)	
14		-114	-114	-110	-107	-105	-105	-106	-111	-114	-115	-118	-116	-108	-119	-115	-105	-103	-100	-99	-100	-103	-107	-109	-100	-104	(-111)
15		-102	-105	-107	-106	-105	-101	-102	-107	-111	-111	-106	-103	-100	-100	-100	-99	-98	-98	-100	-107	-96	-109	-111	-111	-104	-108
16		-103	-106	-103	-101	-102	-102	-104	-108	-112	-111	-108	-105	-103	-101	-100	-103	-104	-106	-108	-105	-103	-104	-104	-104	-104	-104
17		-107	-105	-109	-103	-102	-103	-103	-105	-109	-113	-111	-107	-102	-100	-100	-100	-103	-103	-104	-100	-99	-101	-100	-102	-104	-104
18		-102	-102	-102	-102	-101	-100	-100	-101	-103	-101	-99	-97	-98	-97	-96	-97	-96	-99	-101	-100	-103	-101	-102	-97	-100	
19	Q	-98	-100	-100	-100	-98	-95	-95	-94	-94	-95	-96	-96	-98	-101	-106	-105	-102	-97	-96	-96	-98	-98	-99	-102	-98	
20		-105	-104	-101	-100	-100	-99	-94	-94	-98	-98	-100	-95	-98	-98	-97	-96	-98	-109	-117	-122	-120	-108	-103	-104	-102	
21		-103	-102	-102	-97	-96	-96	-95	-100	-104	-113	-105	-102	-96	-102	-113	-114	-115	-136	-127	-116	-109	-107	-116	-118	-108	
22		-108	-95	-122	-100	-98	-100	-110	-120	-114	-111	-107	-110	-114	-111	-116										(-109)	
23	D									-111	-114	-124	-118	-128	-125	-120	-142	-144	-140	-132	-154	-130	-125	-122	-141	-147	(-130)
24	D	-146	-118	-117	-120	-114	-154	-158	-114	-119	-124	-121	-115	-152	-118	-128	-134	-132	-135	-130	-105	-131	-122	-117	-111	-126	
25		-117	-124	-123	-117	-110	-109	-110	-116	-120	-126	-122	-118	-113	-106	-106	-121	-116	-128	-120	-119	-110	-110	-115	-113	-116	
26		-111	-115	-114	-111	-107	-103	-108	-116	-113	-116	-124	-117	-116	-119	-112	-117	-116	-115	-97	-111	-111	-107	-115	-106	-112	
27		-108	-110	-108	-104	-104	-102	-100	-102	-111	-108	-105	-104	-111	-104	-104	-105	-115	-113	-111	-110	-102	-113	-120	-104	-107	
28		-110	-108	-107	-105	-104	-105	-104	-103	-105	-108	-110	-112	-113	-113	-106	-105	-104	-105	-106	-106	-110	-98	-104	-107	-107	
29	Q	-109	-110	-107	-105	-100	-99	-98	-102	-105	-109	-106	-105	-103	-103	-105	-104	-106	-108	-109	-106	-107	-104	-101	-102	-105	
All Quiet		-110	-109	-108	-105	-103	-103	-104	-106	-111	-115	-114	-112	-111	-109	-111	-108	-107	-110	-110	-108	-108	-107	-109	-108	-109	
Dist.		-103	-104	-103	-103	-100	-98	-98	-102	-105	-107	-105	-105	-103	-103	-104	-102	-101	-101	-101	-100	-101	-101	-100	-100	-102	
		-122	-113	-112	-110	-108	-123	-123	-111	-118	-124	-120	-124	-131	-118	-126	-131	-127	-126	-133	-122	-125	-121	-121	-116	-121	

November 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		736	729	726	731	738	739	742	742	738	730	718	724	722	729	737	729	739	736	733	735	738	737	749	740	734
2		772	708	743	744	740	739	738	739	731	723	727	716	714	725	732	706	732	733	740	736	737	754	769	719	734
3	D	770	749	736	737	733	728	729	730	728	730	727	730	723	731	753	733	736	741	752	749	765	762	754	736	740
4		763	748	738	732	736	734	730	729	725	727	726	723	725	731	733	731	732	733	734	736	740	738	737	734	734
5	Q	735	736	735	735	733	733	734	738	739	737	730	726	725	727	730	732	732	733	734	735	736	736	736	734	733
6		732	735	735	733	735	737	740	742	739	733	727	720	722	725	728	732	734	734	737	744	754	760	745	738	736
7		724	730	731	732	734	734	737	740	739	736	728	723	724	727	729	731	732	733	734	735	736	737	737	737	733
8	Q	736	736	735	734	734	734	735	737	734	728	721	717	718	716	718	729	733	733	734	735	736	740	736	740	731
9		735	734	734	733	733	733	734	733	730	729	724	717	716	705	712	724	725	727	729	765	773	762	742	737	732
10		740	737	733	731	733	734	730	731	730	726	715	718	711	687	687	669	717	763	763	754	783	765	760	752	732
11		768	743	730	732	733	732	733	734	733	726	729	724	721	727	728	722	720	725	729	741	739	744	750	757	734
12	D	750	759	744	741	740	740	736	737	735	731	720	722	732	726	726	744	724	764	765	767	760				(741)
13	D																									(-1400)
14		754	738	730	738	741	742	741	742	738	738	730	726	723	723	745	725	744	733	739	741	742	749	739	752	(737)
15										739	732	728	729	724	734	733	732	730	736	739	740	741	741	742	740	737
16		738	739	737	739	737	737	737	738	738	732	725	723	725	728	730	730	733	734	733	751	750	746	748	742	736
17		747	744	737	736	736	737	738	736	732	729	727	727	727	728	730	731	727	732	735	743	741	741	740	740	735
18		739	744	744	740	738	738	739	739	737	731	725	723	725	727	728	730	742	743	732	735	738	740	741	741	736
19	Q	738	737	736	736	735	735	736	737	737	732	727	724	722	725	725	725	727	729	736	737	739	744	739	736	733
20	Q	736	735	734	734	733	733	734	733	731	726	721	721	723	725	726	726	730	732	733	735	737	743	756	749	733
21		741	737	734	735	737	738	738	736	733	728	722	719	721	719	725	728	729	732	737	746	755	763	748	736	735
22		735	736	731	731	738	737	737	738	735	732	720	720	722	723	724	725	728	767	750	743	743	798	754	742	738
23		748	744	742	722	739	733	732	730	728	725	723	727	728	728	723										(731)
24	D									738	737	723	730	733	719	736	772	719	758	745	806	757	761	822	774	776
25	D	744	763	747	739	742	703	683	727	728	740	742	733	745	739	740	757	797	790	752	790	779	757	744	731	746
26		742	730	728	725	734	733	730	737	735	742	738	730	729	733	735	744	780	772	775	755	750	745	747	738	742
27		734	730	731	722	723	730	736	733	730	726	728	725	730	743	741	737	743	747	755	753	749	750	743	720	736
28		741	733	731	732	735	735	737	737	734	728	724	723	733	733	735	736	750	775	749	746	762	754	739	736	739
29		739	740	739	738	738	739	741	739	739	737	733	733	733	727	731	734	737	738	741	755	753	744	748	743	739
30	Q	742	737	739	738	739	736	737	737	733	732	729	727	728	732	734	735	734	740	736	741	739	738	736	736	736
All Quiet Dist.		744	738	736	734	736	734	734	736	734	733	726	724	724	726	731	728	737	743	744	746	749	752	746	740	736
		737	736	736	735	735	734	735	737	735	733	726	723	723	725	727	729	731	734	735	737	738	741	741	739	733
		755	757	742	739	738	724	716	733	732	731	730	729	729	733	748	738	754	760	769	767	766	780	757	748	743

Nurmijärvi Finland

December 2016 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-100	-100	-99	-96	-94	-96	-97	-95	-98	-101	-103	-102	-102	-101	-101	-100	-99	-98	-98	-98	-99	-99	-100	-99	-100
2		-101	-104	-106	-105	-102	-101	-100	-101	-101	-102	-102	-103	-102	-106	-110	-117	-116	-108	-106	-106	-99	-99	-110	-109	-107
3	Q	-107	-105	-104	-103	-102	-103	-104	-102	-99	-100	-101	-103	-103	-101	-102	-103	-103	-105	-104	-105	-102	-101	-102	-103	-103
4	Q	-103	-102	-102	-101	-100	-100	-99	-100	-100	-99	-97	-97	-97	-99	-98	-96	-95	-93	-94	-98	-98	-100	-101	-103	-99
5		-106	-99	-96	-95	-100	-100	-100	-100	-100	-100	-102	-101	-96	-94	-95	-96	-99	-105	-104	-100	-102	-103	-103	-105	-100
6		-103	-103	-102	-98	-96	-96	-96	-97	-97	-99	-97	-93	-108	-125	-130	-115	-101	-103	-108	-113	-112	-109	-115	-109	-105
7		-110	-108	-106	-103	-101	-99	-99	-111	-120	-111	-109	-109	-107	-106	-107	-116	-120	-125	-115	-109	-123	-117	-116	-117	-111
8	D	-127	-102	-96	-97	-109	-100	-110	-107	-107	-107	-106	-119	-119	-113	-112	-110	-142	-115	-119	-116	-120	-121	-118	-126	-116
9	D	-132	-123	-114	-109	-108	-107	-107	-118	-120	-107	-105	-124	-109	-106	-102	-106	-103	-121	-125	-118	-137	-130	-141	-126	-117
10		-120	-127	-125	-111	-112	-111	-110	-109	-113	-122	-106	-106	-118	-118	-120	-119	-120	-105	-107	-106	-113	-120	-122	-117	-114
11		-126	-112	-108	-103	-118	-111	-100	-102	-106	-113	-124	-116	-116	-109	-113	-126	-102	-112	-93	-93	-116	-112	-109	-117	-110
12		-110	-108	-108	-112	-108	-103	-104	-104	-101	-100	-103	-104	-104	-104	-105	-104	-103	-103	-104	-106	-107	-107	-102	-106	-105
13		-113	-114	-111	-108	-104	-104	-105	-106	-105	-106	-106	-107	-103	-103	-104	-102	-104	-104	-105	-106	-108	-101	-109	-111	-106
14		-111	-110	-107	-106	-107	-103	-105	-104	-102	-102	-103	-107	-105	-101	-99	-101	-100	-102	-104	-107	-107	-106	-108	-107	-105
15	Q	-107	-108	-109	-108	-107	-104	-103	-101	-99	-99	-101	-101	-100	-100	-100	-102	-102	-104	-107	-108	-106	-107	-105	-105	-104
16	Q	-104	-104	-104	-105	-103	-102	-102	-102	-102	-100	-99	-99	-98	-99	-100	-100	-101	-102	-103	-103	-103	-96	-103	-105	-102
17		-107	-106	-104	-104	-104	-105	-104	-101	-99	-97	-92	-93	-96	-99	-102	-102	-107	-111	-102	-109	-106	-103	-101	-111	-103
18		-104	-114	-116	-104	-99	-91	-95	-100	-104	-108	-109	-105	-106	-114	-116	-106	-115	-114	-117	-114	-112	-110	-108	-100	-108
19		-106	-107	-105	-104	-104	-101	-107	-107	-109	-112	-110	-106	-107	-114	-118	-122	-123	-116	-112	-100	-108	-105	-108	-109	-109
20		-112	-110	-105	-103	-103	-100	-101	-108	-110	-112	-110	-106	-107	-106	-108	-122	-127	-123	-106	-103	-104	-107	-95	-116	-109
21	D	-115	-110	-109	-103	-99	-96	-97	-102	-104	-103	-112	-114	-115	-120	-132	-114	-127	-147	-132	-146	-146	-134	-139	-141	-119
22	D	-127	-142	-137	-125	-106	-115	-116	-119	-129	-126	-128	-120	-125	-120	-121	-137	-138	-129	-111	-119	-139	-133	-126	-120	-125
23		-127	-126	-120	-125	-128	-114	-110	-109	-122	-128	-136	-130	-125	-124	-123	-126	-129	-127	-121	-145	-169	-159	-126	-124	-128
24		-124	-118	-119	-116	-109	-108	-111	-118	-123	-116	-111	-108	-125	-111	-114	-117	-96	-124	-117	-108	-108	-111	-113	-114	(-114)
25		-114	-110	-102	-104	-103	-101	-104	-106	-108	-116	-124	-128	-125	-118	-132	-122	-109	-131	-118	-120	-103	-114	-120	-114	-114
26	D	-128	-141	-129	-113	-105	-106	-112	-113	-122	-124	-123	-122	-116	-112	-124	-124	-124	-114	-106	-113	-116	-103	-106	-109	-117
27		-133	-121	-116	-118	-115	-112	-113	-115	-118	-122	-119	-112	-111	-113	-111	-115	-111	-111	-103	-103	-116	-109	-121	-116	-115
28		-111	-112	-112	-108	-102	-103	-107	-112	-112	-114	-115	-109	-103	-106	-112	-116	-119	-110	-111	-107	-105	-105	-108	-110	-110
29		-109	-112	-104	-104	-102	-105	-106	-107	-109	-111	-109	-112	-113	-120	-126	-131	-128	-117	-111	-110	-110	-111	-110	-112	-112
30	Q	-109	-108	-105	-107	-106	-105	-104	-104	-105	-106	-105	-108	-106	-105	-106	-104	-106	-110	-115	-114	-112	-111	-108	-102	-107
31		-106	-107	-104	-101	-100	-97	-91	-89	-95	-101	-101	-111	-110	-110	-118	-141	-136	-132	-140	-128	-133	-122	-113	-118	-113
All		-113	-112	-109	-107	-105	-103	-104	-105	-108	-108	-109	-108	-109	-111	-114	-112	-113	-110	-111	-112	-112	-111	-112	-112	-110
Quiet		-106	-105	-105	-105	-104	-103	-102	-102	-101	-101	-101	-102	-101	-101	-101	-101	-101	-102	-104	-104	-104	-103	-104	-104	-103
Dist.		-126	-124	-115	-109	-106	-105	-108	-112	-116	-113	-117	-120	-116	-114	-118	-125	-121	-126	-118	-123	-124	-128	-123	-118	-118

December 2016 East component Y in nT (Y = 1400 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		739	738	735	735	737	733	738	739	741	739	734	731	731	733	736	737	737	737	738	740	740	740	740	740	737	
2		740	740	739	738	738	737	734	733	733	734	735	734	733	733	736	737	736	736	739	741	757	751	745	744	738	
3	Q	740	741	740	740	739	739	738	736	733	732	730	731	731	734	735	737	736	736	744	750	742	741	740	740	738	
4	Q	739	739	738	738	739	739	738	736	734	733	732	732	734	736	736	737	737	738	737	737	739	740	742	740	737	
5		734	735	749	740	739	739	738	736	733	732	731	729	729	732	732	733	733	740	740	743	746	744	744	742	737	
6		741	742	738	740	739	739	738	737	732	733	731	722	733	710	722	738	741	741	741	743	759	754	762	749	739	
7		744	741	740	737	736	734	737	738	735	720	722	722	729	733	730	733	725	733	741	788	758	750	761	751	739	
8	D	749	738	761	756	740	728	740	737	736	731	734	731	722	735	733	757	734	742	766	762	737	726	768	729	741	
9	D	735	727	742	745	743	740	739	736	725	730	721	727	732	724	725	732	731	730	789	806	762	732	799	777	744	
10		751	746	730	739	749	744	742	737	734	735	735	731	731	741	746	743	771	753	758	772	778	757	751	743	747	
11		721	734	743	744	721	730	741	735	739	736	741	727	737	736	732	739	760	739	762	743	746	747	747	746	739	
12		756	751	747	739	737	737	734	733	735	737	737	734	737	739	740	740	740	740	740	743	744	749	749	743	741	
13		745	744	748	745	743	742	741	740	738	739	735	734	735	736	739	739	741	741	742	742	747	757	746	747	742	
14		743	741	742	743	741	742	740	738	735	737	734	738	741	740	740	739	740	739	745	749	742	741	744	744	741	
15	Q	744	743	742	741	740	740	742	740	738	736	737	736	739	740	740	741	741	740	740	745	744	744	744	742	741	
16	Q	739	741	741	742	739	739	740	738	736	737	738	737	739	741	741	740	740	739	743	741	742	748	741	740	740	
17		742	740	741	740	741	739	737	734	732	732	731	733	735	735	738	735	733	740	755	747	752	744	740	755	740	
18		750	760	755	755	750	743	738	734	738	738	735	734	731	737	747	741	740	744	751	761	748	750	749	750	745	
19		745	744	742	745	740	740	736	737	737	733	731	728	730	730	730	736	745	749	752	749	744	743	742	739	742	
20		742	738	742	742	740	742	742	741	738	733	729	729	731	740	740	743	745	744	744	743	743	745	774	763	742	
21	D	734	749	742	740	737	734	734	736	735	728	727	731	736	745	758	776	756	750	788	802	756	77	777	778	755	
22	D	754	758	711	734	740	726	734	731	738	735	742	741	737	758	759	762	774	752	787	765	777	763	755	740	752	
23		737	729	731	740	740	747	738	739	743	741	757	743	757	767	740	741	794	775	780	785	813	779	760	746	755	
24		729	732	738	743	744	742	744	744	749	739	742	741	768	757	736	744	793	773	751	759	751	747	740	746	(748)	
25		738	735	720	751	742	738	740	743	736	736	736	737	757	734	767	744	804	775	760	753	750	762	766	766	749	
26	D	750	725	723	726	730	731	742	743	740	741	735	733	731	749	754	787	762	747	755	751	754	769	754	765	746	
27		755	731	736	742	747	744	745	747	746	744	741	740	740	756	749	745	745	750	757	758	753	758	762	735	747	
28		741	743	744	744	742	742	740	740	742	741	739	740	740	741	742	745	751	755	745	747	749	749	745	745	744	
29		746	738	733	741	745	743	741	742	741	741	743	739	738	738	746	749	743	742	747	749	746	748	747	749	747	743
30	Q	745	741	741	739	739	739	743	745	743	740	739	737	737	740	744	744	742	742	747	749	750	750	750	751	743	
31		747	744	741	740	738	739	739	739	737	737	734	726	728	725	737	747	757	752	769	797	782	778	767	754	748	
all		742	740	739	741	740	738	739	738	737	735	735	733	735	733	741	743	751	747	754	757	755	750	754	748	743	
Quiet		741	741	740	740	739	740	739	737	736	735	735	735	736	738	739	740	739	739	742	744	743	745	743	743	740	
Dist.		745	739	736	740	738	732	738	737	735	733	732	732	742	746	763	774	746	777	778	766	749	771	758	744		

10 Hourly Means minus Monthly Means

10.1 All Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-5	-4	-1	4	6	7	7	4	-3	-7	-8	-6	-3	0	2	5	4	4	-1	-1	-2	-2	1	-2	14802
February	-4	-5	0	1	6	7	6	3	0	-5	-8	-7	-3	-1	3	2	2	1	4	3	2	0	-5	-3	14803
March	-1	1	2	4	8	7	3	-3	-11	-16	-15	-10	-4	2	6	5	7	8	7	7	4	-7	-4	0	14801
April	3	2	4	6	6	3	-3	-11	-19	-24	-23	-14	-2	6	9	11	11	11	12	10	3	2	1	-3	14804
May	1	4	5	1	-2	-6	-13	-20	-24	-24	-19	-16	0	8	12	16	19	20	19	12	5	1	1	2	14801
June	1	2	2	2	-1	-4	-9	-16	-22	-25	-25	-20	-10	0	10	12	16	19	19	17	12	9	7	5	14807
July	5	5	6	3	-1	-2	-8	-15	-23	-30	-29	-22	-13	-1	7	12	18	18	16	15	14	11	8	5	14805
August	2	2	6	6	3	-3	-9	-15	-22	-28	-21	-13	-4	3	11	11	14	13	11	8	8	7	4	3	14799
September	3	0	1	6	5	4	-1	-11	-17	-20	-17	-10	-3	6	7	9	7	8	9	6	5	1	1	1	14791
October	3	0	2	8	8	9	5	-3	-13	-16	-15	-9	-2	5	1	5	7	8	2	-1	2	-1	-4	0	14786
November	-1	0	1	4	6	5	5	3	-2	-6	-5	-4	-3	0	-2	0	1	-1	-2	0	1	1	-1	1	14791
December	-4	-2	1	3	4	7	6	4	2	2	0	1	1	1	-1	-4	-3	-4	-1	-2	-5	-2	-2	-2	14790
Winter	-3	-3	0	3	5	7	6	4	-1	-4	-5	-4	-2	0	0	1	1	0	0	0	-1	-1	-2	-1	14797
Equinox	2	1	2	6	7	6	1	-7	-15	-19	-18	-11	-3	5	5	8	8	9	8	5	3	-1	-1	0	14796
Summer	2	3	5	3	0	-4	-10	-16	-23	-27	-24	-18	-7	3	10	13	17	18	16	13	10	7	5	4	14803
Year	0	0	2	4	4	3	-1	-7	-13	-17	-16	-11	-4	2	5	7	9	9	8	6	4	2	1	1	14799

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	6	5	3	-1	-4	-3	-1	3	2	-1	-5	-11	-13	-12	-9	-9	-7	-2	5	11	10	12	12	7	2097
February	15	7	4	5	3	2	3	4	2	-4	-10	-16	-19	-17	-15	-9	-6	-3	2	5	11	13	12	11	2102
March	6	2	3	4	8	10	12	11	8	-2	-14	-22	-25	-22	-16	-11	-6	1	2	5	13	13	9	10	2105
April	2	7	7	10	14	17	18	15	8	-4	-15	-27	-31	-27	-20	-11	-4	-1	-2	5	12	12	9	6	2108
May	9	8	12	13	17	20	19	17	6	-7	-19	-29	-32	-26	-20	-13	-5	-1	2	4	5	6	5	8	2111
June	6	10	16	19	20	22	24	21	13	2	-13	-24	-28	-28	-23	-16	-11	-8	-6	-2	-1	0	3	4	2115
July	1	8	15	20	21	20	22	20	12	1	-12	-23	-29	-28	-23	-16	-10	-4	-1	-1	0	1	2	4	2120
August	6	4	9	17	18	19	17	14	6	-6	-19	-28	-29	-23	-17	-9	-1	0	1	0	-1	5	9	8	2123
September	7	6	9	4	2	2	8	8	2	-7	-15	-23	-25	-20	-16	0	-3	3	9	8	13	11	10	5	2129
October	3	-2	-4	-3	-4	-4	-1	2	1	-5	-12	-16	-19	-12	-7	-5	-1	13	12	17	15	13	10	7	2134
November	7	2	-1	-2	-1	-2	-3	0	-2	-6	-10	-12	-12	-10	-6	-8	1	7	8	10	13	16	10	4	2136
December	-1	-3	-4	-2	-3	-5	-4	-5	-6	-8	-8	-10	-8	-4	-2	0	8	4	11	14	12	7	10	5	2143
Winter	7	3	0	0	-1	-2	-1	0	-1	-5	-8	-12	-13	-10	-8	-6	-1	1	7	10	11	12	11	7	2120
Equinox	5	3	4	4	5	6	9	9	5	-4	-14	-22	-25	-20	-15	-7	-3	4	5	9	13	13	10	7	2119
Summer	6	7	13	17	19	20	20	18	9	-2	-16	-26	-29	-26	-21	-13	-7	-3	-1	0	1	3	5	6	2117
Year	6	4	6	7	8	8	10	9	4	-4	-13	-20	-22	-19	-14	-9	-4	1	4	6	8	9	8	6	2119

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-14	-18	-13	-8	-7	-7	-5	-3	-3	-2	-1	2	5	7	11	15	16	16	14	11	4	-4	-7	-8	50100
February	-16	-16	-13	-8	-4	-3	-1	-1	-2	-2	-1	1	6	10	14	13	14	13	14	10	2	-2	-11	-17	50097
March	-16	-13	-9	-6	-3	-1	0	-1	-2	-4	-3	0	4	9	12	12	15	19	13	12	1	-7	-18	-15	50101
April	-16	-11	-3	1	2	2	1	0	-3	-5	-6	-4	3	8	13	17	18	15	13	9	1	-17	-19	-19	50104
May	-24	-17	-13	-10	-6	-2	-2	-2	-4	-5	-5	0	9	17	20	26	27	23	17	5	-2	-14	-17	-22	50107
June	-13	-11	-8	-5	-5	-3	-1	-2	-3	-6	-6	-2	2	6	11	14	14	13	11	4	0	0	-4	-7	50110
July	-12	-14	-10	-7	-7	-7	-6	-6	-5	-5	-4	-2	6	12	15	16	17	16	11	6	3	-2	-6	-8	50116
August	-14	-13	-8	-4	-2	-1	-2	-3	-5	-6	-4	-1	6	14	19	22	19	16	11	2	-1	-11	-16	-15	50121
September	-27	-28	-24	-15	-9	-4	1	2	3	3	6	8	12	22	25	29	24	21	11	4	-13	-13	-14	-25	50124
October	-24	-24	-24	-17	-9	-4	0	2	4	4	7	11	16	31	26	25	24	21	10	-3	-10	-18	-24	-24	50133
November	-19	-15	-10	-7	-5	-4	-2	-2	-2	-1	-1	2	6	11	13	17	18	16	10	7	0	-7	-11	-18	50141
December	-9	-9	-9	-7	-3	-3	-2	-2	-1	0	1	3	5	8	10	14	13	12	9	4	-1	-10	-12	-10	50146
Winter	-15	-15	-11	-8	-5	-4	-3	-2	-2	-1	0	2	6	9	12	15	15	14	12	8	1	-6	-10	-13	50121
Equinox	-21	-19	-15	-9	-5	-2	1	1	0	0	1	4	9	17	19	21	20	19	12	5	-5	-14	-19	-21	50116
Summer	-16	-14	-10	-6	-5	-3	-3	-3	-4	-5	-5	-1	6	12	16	19	19	17	12	4	0	-7	-11	-13	50113
Year	-17	-16	-12	-8	-5	-3	-2	-1	-2	-2	-1	2	7	13	16	18	18	17	12	6	-1	-9	-13	-16	50116

10.2 Quiet Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-1	0	1	3	4	5	5	2	-3	-7	-7	-6	-3	1	1	0	-2	-3	-1	1	2	2	2	1	14806
February	0	1	1	2	3	5	6	2	-5	-10	-11	-8	-3	-1	0	1	2	3	3	3	3	4	1	-1	14809
March	3	3	2	2	5	6	4	-2	-11	-17	-19	-16	-13	-4	0	1	3	4	6	7	8	9	10	9	14808
April	5	5	5	5	6	4	-2	-11	-21	-29	-26	-18	-7	-3	3	4	6	8	10	11	11	11	12	11	14808
May	5	7	7	5	1	-5	-11	-18	-26	-28	-23	-15	-6	1	3	4	10	12	15	15	13	13	10	11	14805
June	5	5	6	6	4	-2	-9	-16	-21	-21	-21	-16	-11	-5	2	6	9	13	16	13	12	9	7	8	14808
July	4	5	6	6	3	1	-5	-13	-20	-27	-28	-21	-14	-4	6	7	12	13	14	16	14	10	8	8	14803
August	5	4	5	4	0	-4	-10	-16	-20	-25	-19	-10	-8	0	8	10	10	9	8	9	11	11	9	8	14802
September	3	3	4	5	6	4	0	-7	-12	-16	-19	-14	-8	-2	3	7	7	6	7	6	4	3	4	5	14800
October	4	2	3	4	7	8	3	-5	-14	-18	-18	-13	-7	-3	-2	-2	2	6	6	7	7	8	8	6	14796
November	-1	-2	-1	-1	2	4	4	1	-3	-5	-3	-3	-1	-1	-2	0	1	1	2	1	1	2	2	2	14798
December	-3	-3	-2	-2	-1	0	0	1	2	2	2	1	2	2	2	2	1	0	-2	-2	-1	0	-1	-1	14797
Winter	-1	-1	0	1	2	4	4	1	-2	-5	-5	-4	-1	0	0	1	1	0	0	1	1	2	1	0	14803
Equinox	4	3	3	4	6	6	1	-6	-14	-20	-20	-15	-9	-3	1	2	5	6	7	8	8	8	8	8	14803
Summer	5	5	6	5	2	-2	-9	-16	-22	-25	-23	-16	-10	-2	5	7	10	12	13	13	12	11	9	9	14805
Year	2	2	3	3	3	2	-1	-7	-13	-17	-16	-12	-7	-2	2	3	5	6	7	7	7	7	6	6	14803

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	1	1	0	0	1	3	5	7	5	1	-4	-9	-10	-8	-7	-4	-2	-1	2	4	3	4	4	3	2096
February	2	0	3	4	4	4	6	7	5	-2	-10	-13	-16	-13	-10	-8	-5	-4	-1	2	7	12	13	9	2100
March	-1	3	7	7	7	9	16	18	15	5	-8	-18	-20	-19	-11	-5	-4	-5	-3	-1	1	1	2	3	2102
April	0	2	5	9	13	19	21	18	13	2	-12	-22	-24	-18	-11	-6	-3	-1	-2	-2	1	-1	-1	-1	2107
May	3	7	12	17	22	25	24	19	6	-6	-18	-25	-25	-22	-15	-7	-3	-1	-3	-3	-3	-1	-2	-2	2111
June	3	7	13	17	20	22	24	19	10	-1	-15	-23	-26	-24	-18	-10	-4	-1	-1	-1	-3	-4	-2	-1	2114
July	3	7	12	18	22	22	23	21	12	1	-10	-20	-26	-27	-19	-12	-6	-4	-5	-6	-3	-1	-1	0	2121
August	5	7	10	16	18	19	18	13	3	-7	-16	-23	-24	-17	-11	-6	-4	-5	-4	-2	-3	2	4	4	2122
September	4	5	7	6	7	11	15	15	10	0	-9	-17	-21	-19	-13	-7	-6	-4	-3	-1	2	5	6	5	2127
October	3	4	2	3	4	5	10	12	10	0	-10	-16	-16	-14	-7	-7	-4	-3	-2	7	5	6	3	4	2130
November	4	3	2	2	1	1	2	3	1	-2	-7	-10	-10	-8	-7	-4	-2	0	1	3	5	7	8	6	2133
December	2	1	1	0	0	0	0	-1	-3	-4	-4	-5	-4	-2	-1	0	-1	-1	2	5	3	5	4	3	2140
Winter	2	1	1	2	2	2	3	4	2	-2	-6	-9	-10	-8	-6	-4	-2	-1	1	4	5	7	7	5	2117
Equinox	1	3	5	6	8	11	15	16	12	2	-10	-18	-20	-17	-11	-6	-4	-3	-2	1	2	3	2	3	2116
Summer	3	7	12	17	21	22	22	18	8	-3	-15	-22	-25	-22	-16	-9	-4	-3	-3	-3	-3	-1	0	0	2117
Year	2	4	6	8	10	12	14	13	7	-1	-10	-17	-18	-16	-11	-6	-4	-2	-2	0	1	3	3	3	2117

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-1	-1	-1	-1	-1	-1	-1	-2	-2	-3	-2	-2	1	2	2	2	3	4	4	3	1	0	-2	-3	50100
February	-1	0	1	1	0	-1	-2	-3	-5	-7	-6	-3	1	3	5	5	4	4	4	5	4	-1	-3	-4	50099
March	-4	-10	-7	-1	1	3	3	2	-2	-6	-7	-6	-2	2	6	6	5	4	4	4	2	2	2	1	50099
April	2	3	4	4	4	4	2	0	-3	-7	-10	-10	-4	-1	1	1	2	2	2	2	2	1	0	0	50104
May	0	4	4	4	3	3	1	-2	-8	-12	-14	-9	-3	2	5	5	5	5	3	3	2	0	0	-1	50110
June	-1	2	3	3	2	2	2	0	-7	-10	-11	-8	-4	0	1	3	4	5	5	4	3	2	1	0	50110
July	-3	0	2	2	0	0	-2	-3	-4	-6	-7	-7	-2	2	5	6	8	6	3	2	1	-1	0	-2	50117
August	-1	0	2	2	2	1	0	-3	-7	-9	-9	-6	-1	4	8	8	5	2	3	2	1	-1	-2	-2	50120
September	-4	-1	0	1	2	3	2	-1	-3	-6	-7	-6	-2	1	4	6	5	4	3	3	3	1	-2	-5	50126
October	-4	-4	-3	-2	-1	0	2	2	0	-2	-3	-1	2	5	6	5	3	2	2	1	-1	-2	-4	50134	
November	-2	-1	-1	-1	0	-1	0	0	0	-2	-2	-1	1	2	3	2	2	2	2	2	1	0	-2	-3	50138
December	0	0	0	0	0	0	0	-2	-2	-2	-2	-1	0	1	1	1	1	1	3	2	2	1	0	-2	50144
Winter	-1	-1	0	0	0	-1	-1	-2	-3	-3	-3	-2	1	2	3	2	2	3	3	3	2	0	-2	-3	50120
Equinox	-2	-3	-2	0	1	2	2	1	-2	-5	-7	-5	-2	2	4	4	4	3	3	3	1	1	-1	-2	50116
Summer	-1	2	3	3	2	1	0	-2	-7	-9	-10	-7	-3	2	5	6	5	5	4	3	2	0	0	-1	50114
Year	-2	-1	0	1	1	1	1	-1	-4	-6	-7	-5	-1	2	4	4	4	3	3	3	2	0	-1	-2	50117

10.3 Disturbed Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-27	-26	-14	7	7	7	9	7	-5	-13	-16	-9	-2	2	10	29	33	39	2	-4	-12	-16	-1	-7	14794
February	-20	-21	-5	-7	6	12	3	3	3	-5	-1	-1	4	2	17	9	13	8	18	3	-1	-8	-21	-9	14790
March	-22	-4	2	4	12	8	-2	-2	-3	-2	-2	4	14	18	21	20	24	35	15	7	3	-70	-57	-25	14787
April	1	2	2	6	5	-3	-7	-10	-18	-22	-22	-15	8	18	28	18	24	13	12	2	-11	-7	-1	-24	14797
May	-11	-4	12	6	2	-14	-30	-33	-30	-21	-9	-7	20	45	47	58	51	37	22	-4	-33	-47	-32	-27	14789
June	-15	-10	-2	7	-5	-13	-9	-18	-23	-29	-29	-22	-5	10	27	18	28	25	28	20	2	5	5	3	14805
July	14	8	10	-4	-7	3	-7	-14	-28	-34	-31	-28	-17	4	11	18	27	20	16	17	13	6	2	0	14805
August	8	3	11	19	16	-1	-7	-7	-16	-28	-27	-14	0	0	13	-1	12	19	11	-5	-7	-4	-3	9	14792
September	1	-5	-21	7	-3	1	5	-19	-25	-25	-17	-9	7	28	24	31	17	7	14	1	-4	-6	-3	-4	14778
October	3	8	2	12	18	20	12	3	-7	-4	-9	0	15	47	3	18	24	28	-22	-38	-31	-35	-46	-21	14771
November	-1	8	9	12	14	-2	11	4	-2	1	-2	-9	4	-4	-10	-6	-4	-11	0	-4	0	1	5	14779	
December	-7	-5	3	9	13	14	10	6	2	5	1	-2	2	4	0	-7	-3	-8	0	-5	-14	-6	-9	-4	14782
Winter	-15	-13	-3	5	10	9	6	6	0	-4	-4	-4	-1	3	6	6	10	9	3	-2	-8	-8	-8	-4	14787
Equinox	-4	0	-4	7	8	7	2	-7	-13	-13	-12	-5	11	28	19	22	22	21	5	-7	-11	-30	-27	-18	14783
Summer	-1	-1	8	7	2	-6	-13	-18	-24	-28	-24	-18	0	15	24	23	30	25	19	7	-6	-10	-7	-4	14798
Year	-6	-4	1	6	6	3	-2	-7	-12	-15	-14	-9	3	15	17	17	21	19	9	0	-8	-16	-14	-9	14789

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	26	22	14	-1	-12	-18	-17	-2	-3	-9	-6	-14	-16	-20	-13	-13	-14	-12	16	16	21	25	22	10	2100
February	30	3	2	5	0	3	3	-2	-4	-8	-21	-24	-32	-23	-28	-6	-3	3	22	19	29	16	8	5	2111
March	14	5	-4	-4	11	9	1	-9	-7	-15	-25	-27	-27	-19	-20	-20	-15	-9	-1	14	44	37	33	33	2111
April	-4	10	12	13	16	16	11	5	1	-9	-21	-35	-39	-40	-31	-21	-2	1	1	19	27	21	29	19	2110
May	36	1	0	-2	9	15	7	14	-1	-13	-23	-37	-42	-32	-26	-17	-5	0	12	18	24	21	10	32	2113
June	16	11	22	24	22	21	20	19	13	5	-10	-24	-30	-36	-33	-24	-19	-15	-11	-5	2	11	11	11	2114
July	-3	23	23	27	18	9	18	19	13	-1	-15	-28	-35	-38	-32	-22	-18	-4	-2	3	13	13	8	12	2120
August	14	0	1	18	23	16	4	3	4	-3	-20	-34	-35	-29	-22	-17	-6	7	9	14	10	23	16	3	2123
September	11	-3	-4	-17	-17	-16	0	-5	-6	-13	-15	-23	-29	-4	-5	56	12	16	27	14	7	11	12	-8	2133
October	2	0	-23	-23	-24	-20	-21	-15	-12	-17	-18	-19	-31	-7	-4	-4	0	56	17	45	31	28	26	33	2146
November	10	12	-2	-6	-6	-21	-29	-12	-13	-14	-15	-15	-15	-12	3	-6	9	15	24	21	22	36	13	3	2145
December	-3	-8	-11	-7	-10	-15	-10	-11	-13	-15	-16	-15	-16	-5	-2	15	27	-2	30	31	19	2	23	10	2147
Winter	16	6	0	-2	-8	-13	-12	-6	-7	-11	-14	-17	-20	-15	-10	-2	5	1	23	22	23	17	16	7	2124
Equinox	6	3	-5	-8	-3	-3	-2	-6	-6	-13	-20	-26	-31	-18	-15	3	-1	16	11	23	27	24	25	19	2125
Summer	16	9	11	17	18	15	12	14	7	-3	-17	-31	-35	-34	-28	-20	-12	-3	2	8	12	17	11	14	2117
Year	12	6	2	2	2	0	0	1	-2	-9	-17	-25	-29	-22	-18	-6	-3	5	12	18	21	20	17	14	2122

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-42	-65	-56	-37	-30	-34	-24	-11	-4	-1	4	14	12	18	40	64	62	49	43	34	12	-15	-12	-20	50102
February	-53	-55	-37	-20	-5	-2	-1	2	6	8	9	12	21	31	48	38	42	29	33	17	-17	-16	-40	-51	50096
March	-52	-29	-19	-23	-14	-5	5	2	5	8	14	18	25	26	22	23	38	59	47	45	-10	-50	-87	-48	50094
April	-46	-46	-22	-10	-9	-6	-5	-4	-4	-5	-1	7	24	31	41	49	46	45	36	18	-5	-29	-47	-58	50107
May	-69	-49	-43	-42	-21	-6	-11	-1	4	10	15	25	38	59	56	80	84	66	42	1	-25	-68	-66	-78	50092
June	-45	-48	-39	-26	-14	-6	0	1	3	3	5	10	16	20	32	38	40	33	20	-12	-11	-1	-10	-8	50102
July	-34	-41	-27	-20	-22	-25	-16	-10	-5	-1	4	12	26	31	37	35	36	34	20	7	3	-11	-15	-17	50115
August	-26	-33	-20	-8	-5	-6	-8	-7	-7	-5	2	10	22	32	39	41	42	38	24	-5	-13	-40	-41	-25	50122
September	-69	-84	-77	-50	-33	-15	2	9	15	22	36	34	43	73	74	84	57	50	16	-3	-44	-45	-44	-53	50118
October	-59	-56	-62	-48	-23	-14	-4	1	5	8	21	30	41	100	82	85	69	62	20	-9	-39	-63	-82	-65	50137
November	-64	-35	-26	-20	-17	-19	-10	-5	-3	3	5	13	23	35	37	32	28	25	17	7	-7	-16	-30	-42	50144
December	-21	-25	-24	-15	-6	-4	-1	0	3	4	5	9	13	17	21	42	30	24	27	13	-4	-38	-39	-31	50146
Winter	-44	-47	-38	-24	-15	-15	-9	-3	1	4	6	12	18	25	37	45	41	33	31	19	-3	-23	-31	-36	50120
Equinox	-56	-54	-45	-33	-20	-10	-1	2	5	8	17	22	33	58	55	60	53	54	30	13	-25	-47	-65	-56	50114
Summer	-44	-43	-32	-24	-16	-11	-9	-4	-1	2	6	14	25	36	41	48	51	43	26	-2	-12	-30	-33	-32	50108
Year	-48	-48	-39	-27	-17	-12	-6	-2	2	5	10	16	26	40	44	51	48	43	29	10	-13	-34	-43	-42	50114

11 Monthly and Annual Means

All days

	Z	H	D	F	X	Y	I
January	50100	14950	8° 03.9'	52283	14802	2097	73° 23.1'
February	50097	14951	8° 05.0'	52281	14803	2102	73° 23.0'
March	50101	14950	8° 05.6'	52284	14801	2105	73° 23.1'
April	50104	14953	8° 06.3'	52288	14804	2108	73° 22.9'
May	50107	14951	8° 07.1'	52290	14801	2111	73° 23.1'
June	50110	14958	8° 07.7'	52295	14807	2115	73° 22.8'
July	50116	14956	8° 08.8'	52300	14805	2120	73° 23.0'
August	50121	14951	8° 09.8'	52303	14799	2123	73° 23.4'
September	50124	14943	8° 11.5'	52304	14791	2129	73° 23.9'
October	50133	14939	8° 12.8'	52311	14786	2134	73° 24.4'
November	50141	14945	8° 13.1'	52321	14791	2136	73° 24.2'
December	50146	14945	8° 14.7'	52326	14790	2143	73° 24.3'
Winter	50121	14948	8° 09.1'	52302	14797	2120	73° 23.6'
Equinox	50116	14947	8° 09.0'	52297	14796	2119	73° 23.6'
Summer	50113	14954	8° 08.4'	52297	14803	2117	73° 23.1'
Year	50116	14949	8° 08.8'	52299	14799	2119	73° 23.4'

5 Quiet days

	Z	H	D	F	X	Y	I
January	50100	14954	8° 03.5'	52284	14806	2096	73° 22.8'
February	50099	14957	8° 04.2'	52284	14809	2100	73° 22.6'
March	50099	14957	8° 04.7'	52284	14808	2102	73° 22.7'
April	50104	14957	8° 05.8'	52289	14808	2107	73° 22.7'
May	50110	14954	8° 07.0'	52293	14805	2111	73° 23.0'
June	50110	14959	8° 07.5'	52295	14808	2114	73° 22.7'
July	50117	14954	8° 09.3'	52300	14803	2121	73° 23.1'
August	50120	14953	8° 09.4'	52303	14802	2122	73° 23.2'
September	50126	14952	8° 10.6'	52308	14800	2127	73° 23.5'
October	50134	14949	8° 11.6'	52315	14796	2130	73° 23.8'
November	50138	14951	8° 12.2'	52320	14798	2133	73° 23.7'
December	50144	14951	8° 13.7'	52326	14797	2140	73° 23.8'
Winter	50120	14953	8° 08.4'	52303	14803	2117	73° 23.3'
Equinox	50116	14953	8° 08.2'	52299	14803	2116	73° 23.2'
Summer	50114	14955	8° 08.3'	52298	14805	2117	73° 23.0'
Year	50117	14954	8° 08.3'	52300	14803	2117	73° 23.1'

5 Disturbed days

	Z	H	D	F	X	Y	I
January	50102	14943	8° 04.8'	52283	14794	2100	73° 23.6'
February	50096	14940	8° 07.5'	52276	14790	2111	73° 23.7'
March	50094	14937	8° 07.4'	52274	14787	2111	73° 23.8'
April	50107	14947	8° 06.9'	52289	14797	2110	73° 23.4'
May	50092	14939	8° 07.9'	52272	14789	2113	73° 23.6'
June	50102	14955	8° 07.7'	52286	14805	2114	73° 22.8'
July	50115	14956	8° 08.9'	52299	14805	2120	73° 23.0'
August	50122	14944	8° 10.0'	52302	14792	2123	73° 23.9'
September	50118	14931	8° 12.9'	52294	14778	2133	73° 24.6'
October	50137	14926	8° 16.0'	52311	14771	2146	73° 25.3'
November	50144	14933	8° 15.4'	52321	14779	2145	73° 25.0'
December	50146	14937	8° 15.9'	52323	14782	2147	73° 24.8'
Winter	50120	14939	8° 10.6'	52299	14787	2124	73° 24.2'
Equinox	50114	14935	8° 10.8'	52292	14783	2125	73° 24.3'
Summer	50108	14949	8° 08.6'	52290	14798	2117	73° 23.3'
Year	50114	14941	8° 10.0'	52294	14789	2122	73° 23.9'

12 Hourly Means of All Days as Sequenced in Bartels' 27-day Solar Rotation Number

12.1 H-Component

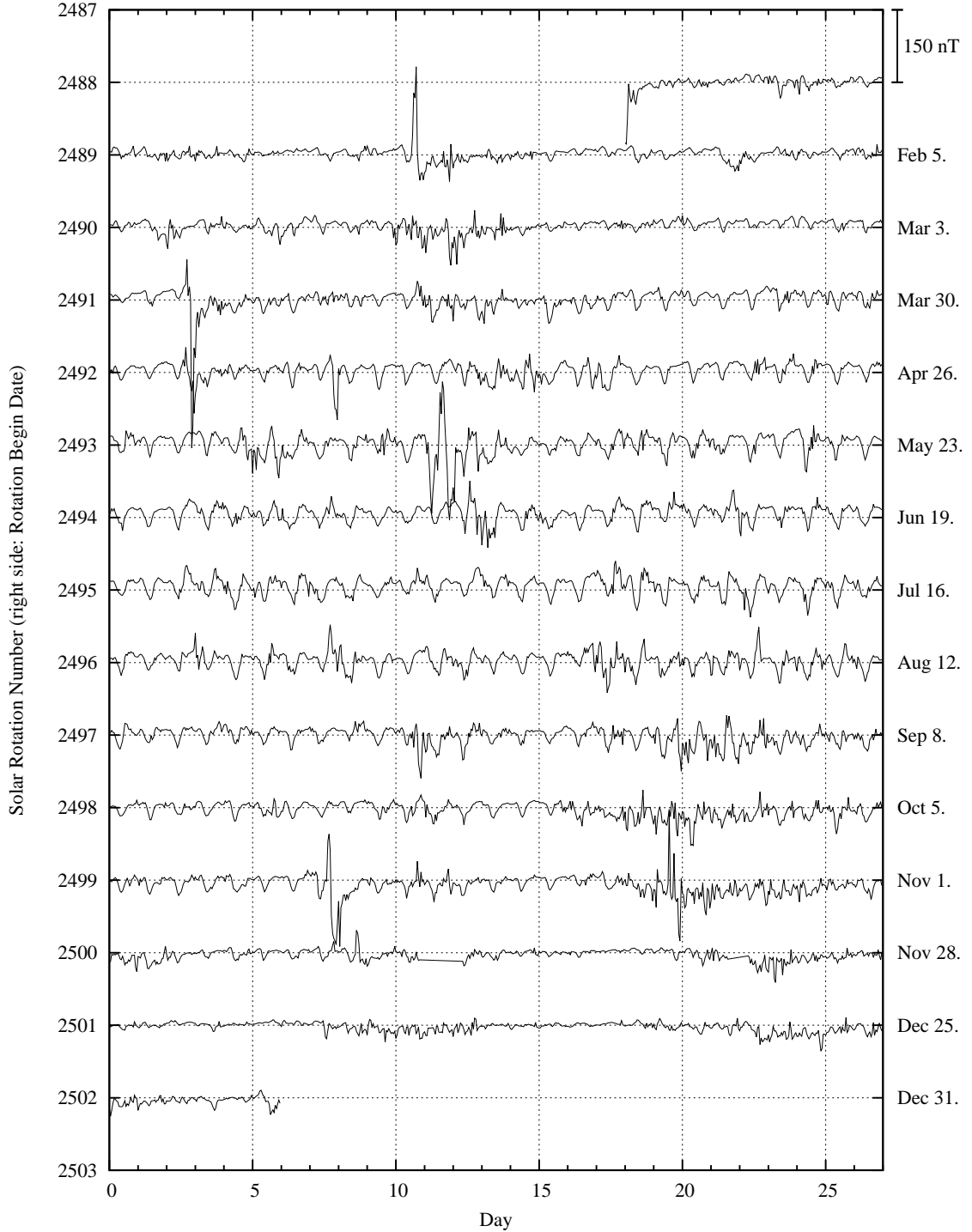


Figure 4: Hourly means of H sequenced in Bartels' solar rotation cycles.

12.2 D-Component

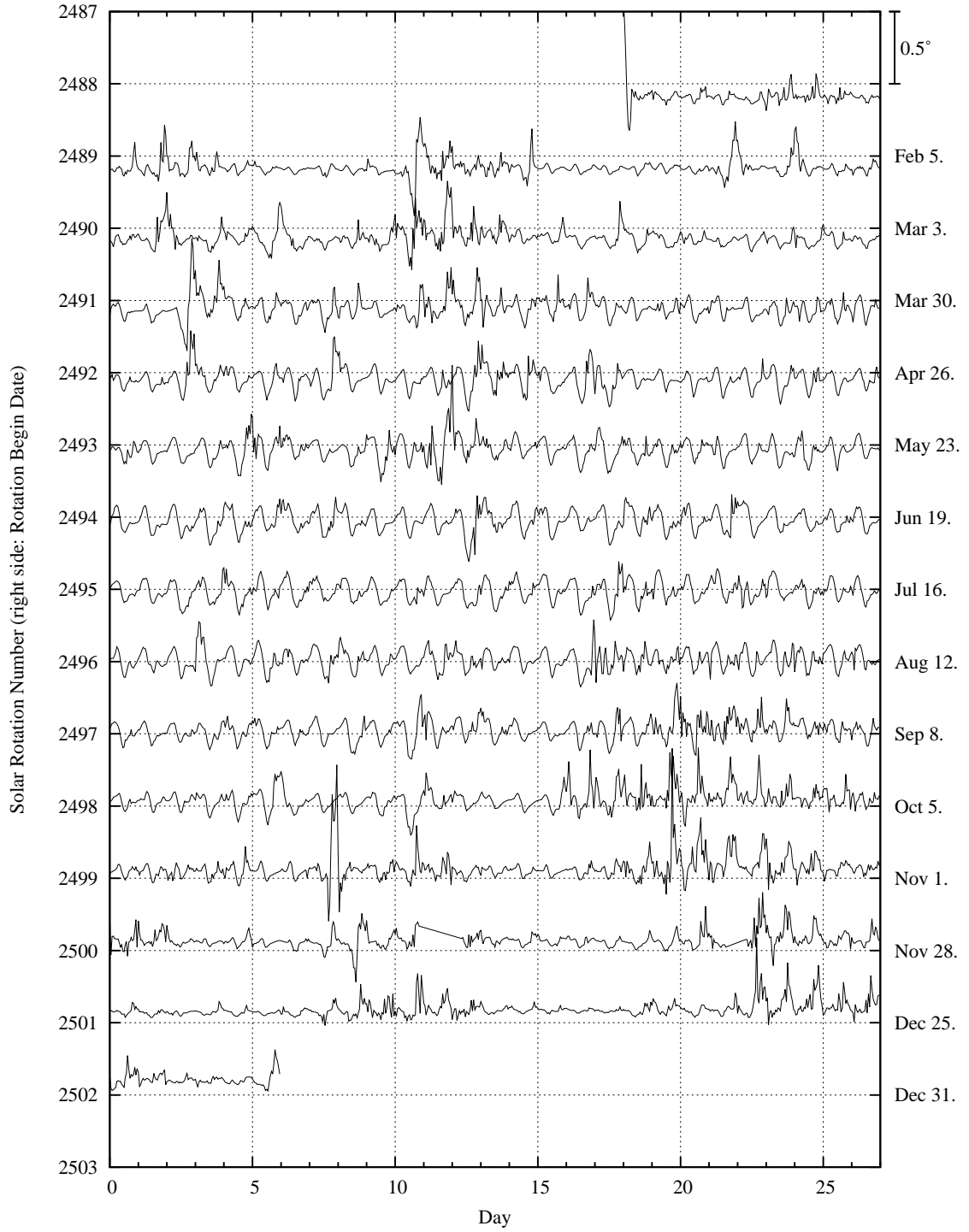


Figure 5: Hourly means of D sequenced in Bartels' solar rotation cycles.

12.3 Z-Component

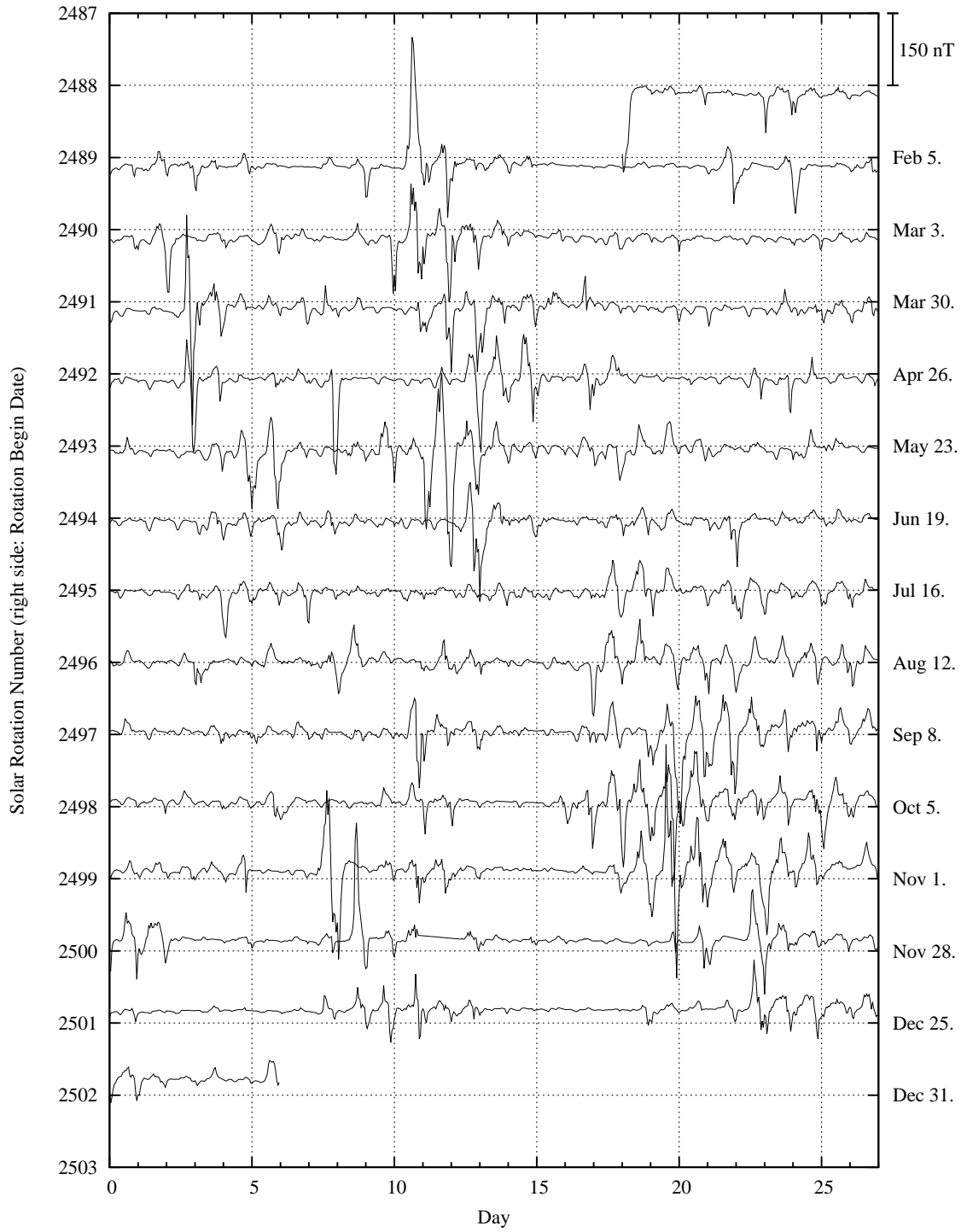


Figure 6: Hourly means of Z sequenced in Bartels' solar rotation cycles.

13 K-Indices

13.1 Monthly Tables of K-Indices

January										February										March										
Day	K								Ak	Day	K								Ak	Day	K								Ak	
1	6	5	5	2	1	1	2	1	25	1	3	3	1	2	0	0	0	0	1	1	2	0	0	1	1	0	0	3	6	
2	2	1	3	2	2	2	2	2	8	2	0	0	0	1	1	2	2	4	6	2	3	1	1	1	1	1	1	3	6	
3	1	1	1	1	1	1	2	2	3	3	4	4	2	1	1	1	1	0	9	3	2	1	1	2	2	3	1	1	6	
4	1	1	1	1	0	2	2	1	4	4	0	0	1	2	2	2	2	1	4	4	2	2	2	2	2	1	0	2	3	
5	0	1	1	1	1	1	1	3	2	5	2	2	2	2	2	2	3	2	8	5	3	2	0	1	0	0	0	0	3	
6	4	2	2	2	3	3	4	4	17	6	1	2	1	1	1	2	2	3	6	6	0	0	2	2	2	2	0	0	62	
7	3	2	2	3	3	3	3	1	12	7	1	0	1	2	2	4	3	3	10	7	0	1	2	2	3	6	7	8	30	
8	1	2	1	2	3	1	2	1	6	8	5	3	3	2	1	1	1	1	12	8	5	4	3	3	3	4	5	5	11	
9	1	0	1	1	1	1	2	0	1	3	2	1	1	2	2	1	1	3	6	9	3	2	2	2	2	2	4	2	5	
10	2	1	1	2	2	1	3	3	8	10	2	1	0	0	0	1	2	2	3	10	1	1	1	1	2	2	2	2	6	
11	1	2	2	1	2	4	5	4	16	11	1	1	1	1	2	3	3	4	10	11	2	1	1	1	1	1	2	3	19	
12	4	2	2	2	1	2	4	3	13	12	3	1	2	3	2	2	2	2	9	12	1	2	2	3	5	3	4	4	13	
13	4	3	1	2	2	3	3	1	12	13	1	2	2	2	1	1	0	1	4	13	3	2	2	2	2	4	4	1	2	
14	0	1	2	2	1	2	2	3	6	14	1	1	2	1	2	4	2	2	8	14	0	1	1	1	1	1	0	1	8	
15	2	2	1	0	1	2	1	1	4	15	2	2	2	2	1	1	2	4	9	15	2	0	1	1	1	1	2	3	4	25
16	0	0	0	1	1	0	0	0	1	16	5	2	2	3	5	5	6	5	38	16	4	3	3	3	1	3	6	4	18	
17	0	0	1	0	1	1	1	0	2	17	4	3	2	3	4	4	5	6	31	17	5	2	2	3	3	2	3	4	20	
18	0	0	0	0	0	2	0	2	2	18	4	4	3	3	2	4	5	3	23	18	4	4	3	3	2	4	4	3	8	
19	4	2	2	3	1	2	0	1	9	19	3	2	2	3	3	4	4	2	15	19	1	1	2	2	2	2	3	3	12	
20	0	1	2	3	5	6	6	4	33	20	2	1	1	1	1	1	1	1	4	20	2	2	2	3	3	4	2	2	11	
21	3	4	4	3	2	5	4	5	27	21	1	1	1	0	0	1	3	3	5	21	1	2	1	2	1	4	4	2	7	
22	3	3	3	2	2	2	3	3	12	22	0	0	0	1	1	1	1	1	2	22	2	2	1	2	2	2	2	2	7	
23	2	2	2	1	2	3	2	2	8	23	2	0	0	1	1	1	3	4	7	23	2	1	2	3	2	1	1	2	7	
24	2	2	2	1	2	2	5	1	11	24	2	1	1	1	1	1	2	2	5	24	1	2	2	2	2	1	2	3	6	
25	0	0	1	0	0	0	0	0	0	25	2	1	1	1	1	1	1	2	4	25	2	1	2	2	2	2	2	1	1	4
26	0	0	0	2	1	1	1	1	2	26	3	2	1	1	1	1	2	0	5	26	2	1	1	2	1	2	1	0	1	
27	1	1	1	1	1	1	0	0	2	27	0	1	1	1	0	1	1	1	2	27	0	0	0	0	0	0	1	1	10	
28	0	0	1	2	1	1	1	1	3	28	1	0	1	1	1	0	1	2	3	28	2	2	2	3	3	3	2	2	9	
29	0	0	0	0	0	1	1	1	1											29	2	3	1	1	2	2	3	3	10	
30	0	0	0	0	0	1	0	0	0											30	3	2	2	3	2	3	2	2	12	
31	2	1	1	2	2	3	3	4	11																					
Mean									8.7	Mean									8.9	Mean										11.6

April										May										June										
Day	K								Ak	Day	K								Ak	Day	K								Ak	
1	3	2	1	1	1	2	1	1	3	1	0	1	2	2	2	2	3	16	1	2	2	2	2	2	2	2	3	3	4	6
2	2	0	0	0	1	0	2	1	24	2	2	1	1	3	4	3	4	4	25	2	2	1	1	2	2	2	2	1	2	
3	1	0	0	1	4	4	5	6	11	3	5	4	2	3	3	3	5	4	11	3	1	1	0	1	1	1	0	1	2	
4	3	2	2	2	1	2	4	3	6	4	3	2	2	2	2	3	3	3	4	4	1	0	1	1	0	1	0	1	3	
5	2	2	1	2	2	1	1	2	5	5	1	1	0	1	2	2	1	1	7	5	1	0	0	1	1	1	2	1	34	
6	0	0	0	2	2	2	3	2	7	6	0	1	2	2	3	3	1	2	15	6	1	2	2	4	5	5	6	5	22	
7	2	0	2	2	3	2	1	2	21	7	2	1	2	3	4	3	4	3	9	7	5	4	3	4	3	2	4	2	9	
8	2	1	1	2	1	3	5	6	6	8	3	1	2	3	2	2	1	3	64	8	2	1	1	2	3	2	3	3	7	
9	4	2	0	1	1	1	1	1	2	9	5	5	5	5	6	6	6	6	29	9	2	2	1	2	3	2	1	1	4	
10	0	0	1	1	1	2	0	1	5	10	6	3	3	4	4	3	4	4	14	10	2	0	1	1	2	1	1	1	7	
11	1	1	2	1	2	1	0	3	5	11	3	3	2	3	4	2	3	2	6	11	1	1	0	2	3	2	3	2	12	
12	0	0	0	1	3	3	1	2	17	12	2	1	1	2	1	2	1	3	4	12	3	1	2	2	3	3	2	4	12	
13	3	2	1	3	4	3	4	4	24	13	1	1	1	1	2	0	1	2	7	13	2	2	2	2	4	3	3	2	11	
14	5	3	3	4	4	3	4	3	22	14	1	0	1	2	3	2	3	2	12	14	3	3	2	3	3	2	2	1	16	
15	3	2	2	3	4	5	4	4	9	15	3	2	2	3	3	2	3	3	16	15	2	2	2	1	3	3	5	4	18	
16	3	2	1	2	2	3	2	2	14	16	3	2	2	3	4	4	4	1	13	16	5	2	3	4	4	3	1	1	9	
17	0	1	2	3	2	4	4	4	16	17	2	3	2	3	4	3	2	2	15	17	2	2	2	3	3	2	2	1	10	
18	4	3	2	2	3	3	4	3	5	18	2	2	2	4	4	3	3	3	9	18	1	2	2	3	3	3	3	1	9	
19	2	1	2	2	2	1	1	0	1	19	1	2	3	3	3	2	1	1	8	19	2	2	2	3	3	2	2	2	5	
20	0	0	0	1	2	0	0	0	3	20	1	1	2	2	3	3	2	1	6	20	2	2	2	1	2	2	1	0	4	
21	0	1	1	1	1	1	1	1	4	21	2	2	2	2	2	1	1	2	16	21	1	1	2	1	2	1	1	1	4	
22	0	1	1	2	1	2	2	1	15	22	2	3	4	3	4	3	3	1	9	22	1	1	1	1	3	1	1	0	8	
23	1	1	2	2	4	4	3	4	10	23	2	2	3	3	3	2	1	0	3	23	1	1	1	2	2	3	3	2	12	
24	1	2	1	2	3	2	2	4	12	24	0	1	1	2	1	1	1	0	5	24	2	3	1	2	2	3	3	4	14	
25	1	2	2	1	3	4	4	1	5	25	2	1	2	3	2	0	1	0	2	25	4	3	2	2	3	3	2	3	7	
26	1	0	2	2	3	2	1	0	8	26	0	1	1	2	1	1	0	0	3	26	2	1	1	1	2	2	2	3	12	
27	1	1	1	2	2	2	3	3	9	27	0	0	1	1	1	2	2	1	13	27	2	2	1	2	3	3	3	4	7	
28	1	1	2	2	3	3	3	2	5	28	2	2																		

July

Day	K					Ak				
1	0	1	0	2		1	3	3	2	7
2	3	2	2	3		2	1	0	1	7
3	1	1	1	2		2	1	3	3	11
4	3	2	2	2		2	2	2	4	7
5	2	2	2	2		1	1	3	2	5
6	1	1	1	2		2	1	2	1	6
7	0	1	1	1		2	2	2	3	23
8	3	3	2	3		4	4	5	4	16
9	3	2	3	3		3	4	4	2	16
10	3	3	3	3		4	3	3	2	11
11	2	2	2	3		4	2	2	2	11
12	2	2	2	3		3	3	2	3	16
13	3	4	3	3		3	3	2	3	9
14	3	2	2	2		3	2	2	2	11
15	2	2	3	3		3	3	2	2	13
16	3	3	3	3		3	3	2	2	9
17	3	2	2	2		3	2	2	1	5
18	1	1	1	2		2	2	2	1	4
19	1	1	2	1		1	1	0	2	7
20	2	1	1	1		2	1	1	4	19
21	5	4	3	3		3	3	3	1	6
22	1	0	2	2		2	3	1	1	12
23	1	1	2	2		4	4	3	2	8
24	2	3	3	2		2	1	1	2	14
25	1	1	1	2		3	4	4	4	16
26	4	3	2	3		3	3	3	3	5
27	1	2	1	1		1	2	2	2	2
28	0	0	0	1		1	1	1	2	14
29	2	3	2	2		3	3	4	3	13
30	3	3	3	3		3	3	2	2	6
31	3	1	2	2		1	1	1	1	3
Mean						10.1				

August

Day	K								Ak
1	2	0	0	1	2	2	1	0	4
2	2	1	0	1	1	2	1	2	18
3	1	1	1	3	3	4	4	5	33
4	5	4	4	4	4	6	3	3	15
5	3	3	2	3	3	4	3	2	21
6	2	4	4	4	4	3	2	4	12
7	3	2	2	3	3	3	2	3	15
8	4	2	2	2	4	4	1	3	11
9	3	2	2	2	3	4	2	0	17
10	1	3	2	3	5	4	2	3	16
11	4	2	2	3	3	4	3	3	9
12	2	1	1	2	2	3	3	3	11
13	4	2	2	3	2	3	2	1	5
14	2	1	0	1	2	2	2	1	5
15	1	1	1	2	3	1	1	0	3
16	1	0	1	1	1	2	0	2	6
17	1	0	0	2	2	2	2	3	8
18	2	2	1	2	2	1	3	3	7
19	2	3	1	2	2	2	1	2	3
20	0	0	1	1	2	2	1	1	3
21	2	1	1	1	1	0	0	1	11
22	0	0	1	2	4	4	2	3	4
23	1	1	1	1	1	1	2	2	29
24	1	2	1	3	3	4	6	6	15
25	4	3	2	4	3	2	2	3	11
26	2	2	2	2	3	3	3	3	7
27	3	1	0	1	2	3	2	2	5
28	2	2	1	2	2	1	1	0	2
29	0	0	1	1	1	1	1	0	9
30	1	0	1	3	3	2	3	3	24
31	3	1	2	3	4	5	4	5	6
Mean									11.1

September

Day	K								Ak
1	2	1	1	2	1	1	2	3	26
2	4	3	3	3	4	3	5	5	40
3	6	5	4	4	5	4	3	5	31
4	4	4	3	4	4	4	5	5	21
5	4	3	3	3	3	4	4	4	15
6	2	3	3	2	2	4	4	3	15
7	2	2	3	3	3	3	4	3	9
8	2	2	2	2	3	3	2	2	11
9	3	2	2	2	3	3	3	2	3
10	1	1	0	0	2	1	1	2	4
11	1	1	1	1	0	0	1	3	3
12	0	0	0	1	2	1	2	1	6
13	2	1	1	2	3	0	1	2	4
14	2	1	1	1	1	1	0	2	10
15	1	1	1	2	3	2	4	3	6
16	3	1	1	2	1	1	1	2	3
17	0	0	0	2	1	2	2	1	3
18	1	0	0	2	1	0	0	2	6
19	1	1	1	2	2	2	2	2	8
20	1	0	2	3	3	2	2	2	18
21	4	4	3	4	2	3	3	2	6
22	3	2	2	2	1	0	1	2	2
23	2	1	1	1	1	0	0	0	2
24	0	1	1	1	1	1	0	1	5
25	0	0	1	1	2	1	2	3	26
26	4	4	1	4	3	3	5	5	19
27	4	3	2	3	3	3	4	4	30
28	5	4	3	3	5	5	4	3	36
29	4	4	3	3	4	5	6	5	33
30	4	4	4	4	5	5	5	3	25
Mean									14.2

October

Day	K								Ak
1	3	3	3	3	3	4	6	3	9
2	3	3	2	2	2	3	3	4	3
3	3	3	2	2	2	3	3	4	4
4	2	2	3	1		2	3	4	3
5	3	4	2	3		4	2	5	4
6	3	3	2	2		2	3	2	2
7	1	2	1	1		1	2	3	1
8	2	1	1	1		1	2	3	1
9	2	2	1	2		1	1	2	2
10	2	1	1	1		2	1	3	2
11	3	2	1	2		1	3	4	1
12	0	0	1	2		1	0	0	1
13	1	1	0	2		1	1	3	3
14	2	2	3	3		5	8	6	6
15	6	4	3	2		2	2	1	1
16	2	2	1	2		2	3	2	3
17	3	1	2	3		3	3	6	3
18	3	3	3	3		2	4	4	4
19	2	2	2	2		2	1	2	3
20	3	1	1	2		1	1	2	1
21	1	0	1	0		1	0	2	1
22	0	0	0	0		0	0	0	0
23	1	0	0	1		1	2	3	2
24	0	2	2	2		1	3	3	3
25	3	3	2	2		3	3	2	4
26	5	4	2	4		7	7	5	7
27	4	4	3	4		4	5	6	5
28	4	3	3	2		3	5	4	4
29	2	1	2	3		3	4	4	4
30	5	4	3	3		3	3	3	3
31	4	3	3	2		4	4	4	2
Mean									8.5

November

Day	K								Ak
1	2	3	2	3	2	3	3	2	9
2	2	1	1	2	3	2	1	4	18
3	5	1	1	2	3	3	2	5	14
4	3	1	2	3	3	3	3	4	4
5	3	1	1	0	0	0	2	1	1
6	1	0	1	1	0	0	0	0	4
7	1	0	1	1	2	1	2	2	2
8	2	0	1	1	1	1	0	0	2
9	0	0	0	1	2	0	0	2	6
10	0	0	1	1	2	2	3	3	17
11	1	1	1	2	3	5	4	4	10
12	4	1	2	2	1	2	2	3	14
13	3	2	2	3	3	4	3	0	
14				2	3	4	3	3	16
15	3	2	2	2	2	2	1	1	7
16	1	1	1	1	0	1	3	2	5
17	1	0	1	1	0	1	1	0	2
18	1	0	0	0	0	2	1	1	2
19	0	0	0	0	1	0	2	1	2
20	0	0	1	1	1	1	1	2	3
21	1	1	1	1	1	2	2	3	6
22	1	1	1	2	2	4	3	5	14
23	4	3	2	1	2				12
24				2	5	3	5	4	29
25	4	4	4	2	4	5	4	2	25
26	2	2	2	2	2	4	3	2	11
27	2	2	2	2	2	1	3	3	9
28	2	1	1	1	2	4	3	3	10
29	1	0	0	1	1	1	3	3	5
30	1	1	1	1	0	1	1	1	3
Mean									8.7

December

Day	K								Ak
1	1	1	0	0	1	0	0	0	1
2	0	1	1	1	1	1	2	2	4
3	0	0	0	0	0	1	3	0	2
4	0	0	0	0	0	0	0	1	0
5	3	1	0	0	1	2	1	1	4
6	0	1	1	2	3	2	3	3	8
7	0	1	2	1	2	3	4	3	10
8	3	3	3	2	3	4	4	4	19
9	3	2	2	3	3	3	5	5	21
10	3	3	2	3	3	3	3	2	13
11	3	3	2	2	2	4	4	2	14
12	2	1	1	1	1	1	0	2	4
13	1	1	1	1	1	1	1	2	4
14	1	1	1	2	1	1	2	1	4
15	0	0	0	1	0	0	1	0	1
16	1	0	0	0	0	0	1	2	2
17	0	0	0	1	1	1	3	3	5
18	3	1	1	2	2	1	2	2	7
19	1	1	1	0	1	1	2	1	3
20	1	1	1	1	1	2	1	4	7
21	3	1	1	2	3	6	5	4	25
22	4	4	2	2	3	3	5	5	20
23	3	2	2	3	3	4	5	4	20
24	2	2	2	2	3	4	3	2	12
25	3	3	1	3	4	5	4	3	21
26	3	2	2	3	4	5	3	4	20
27	4	2	2	2	3	1	3	3	12
28	2	1	0	1	1	2	1	2	4
29	2	1	0	1	2	2	1	1	4
30	0	1	1	0	1	0	1	2	2
31	1	1	1	2	3	3	3	3	10
Mean									9.1

13.2 K-Indices Sequenced in Bartels Solar Rotation Number

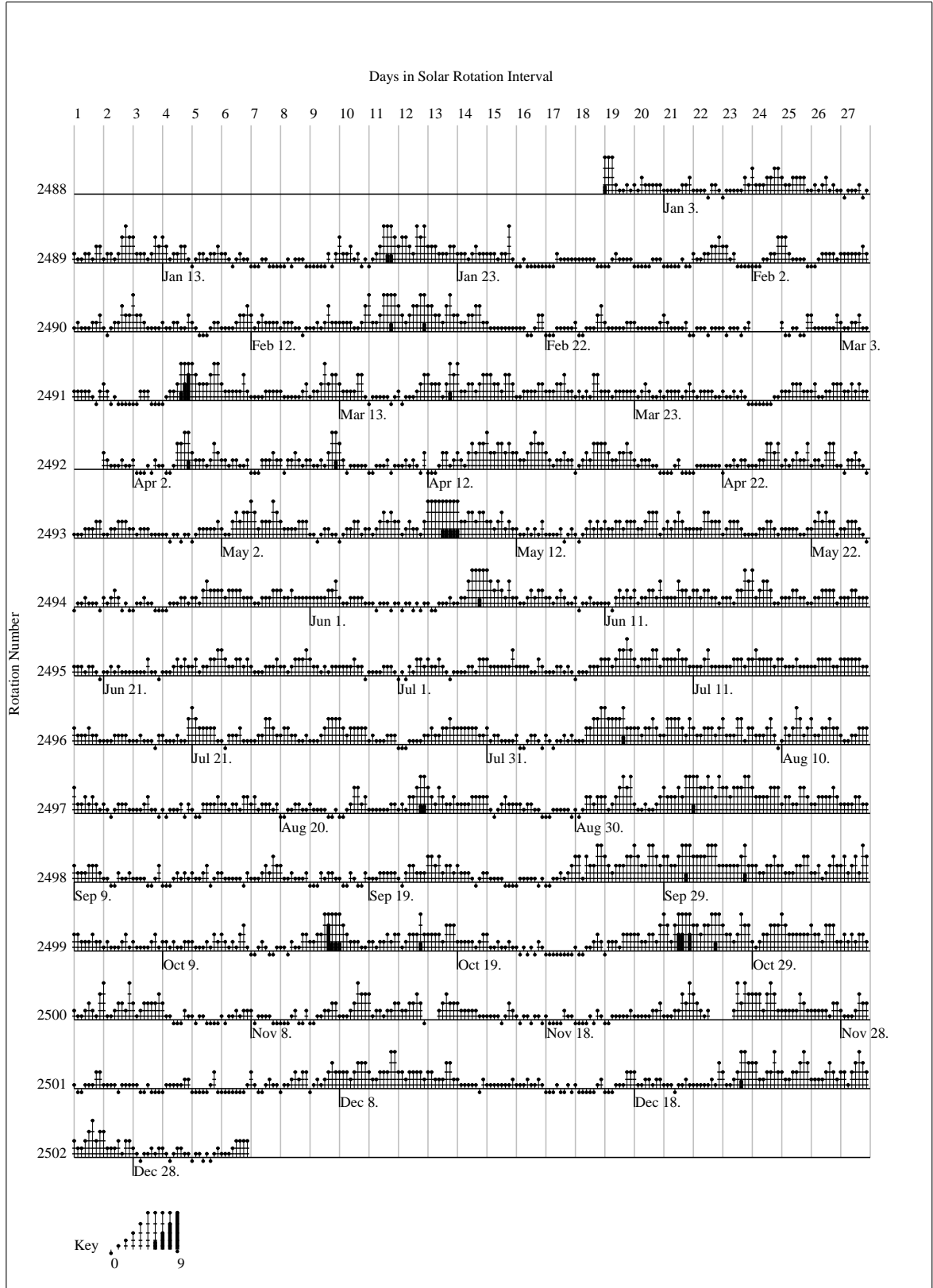


Figure 7: K-indices sequenced in Bartels solar rotation number

13.3 Ak-Indices

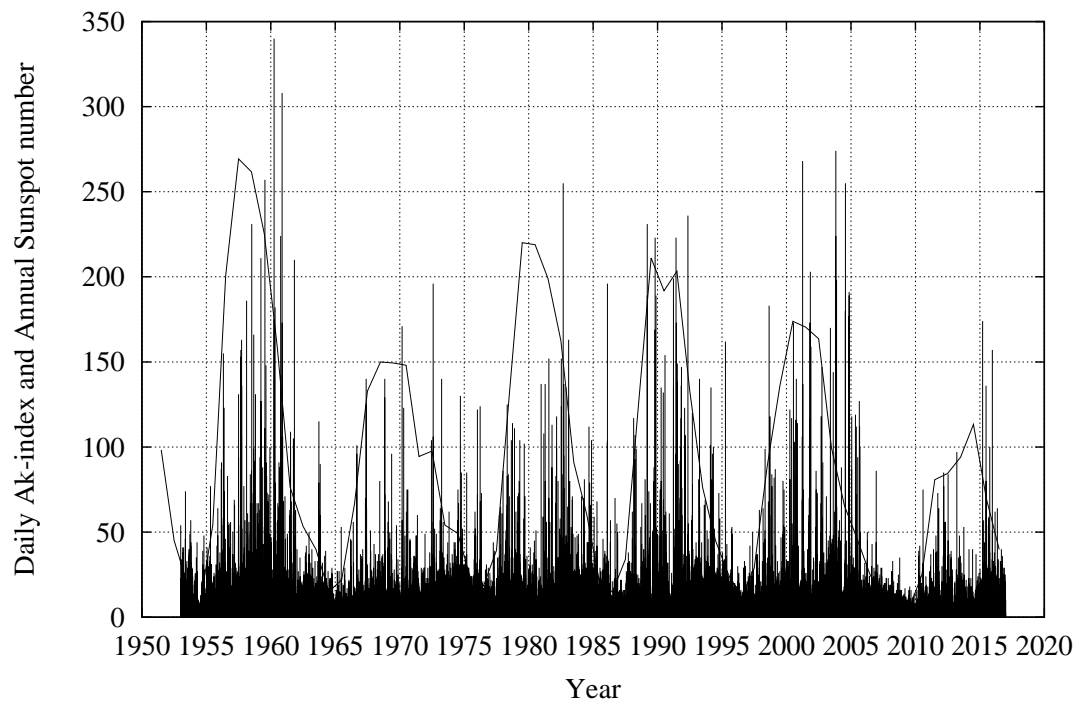


Figure 8: Daily Ak-indices (vertical lines) and sunspots (solid line)

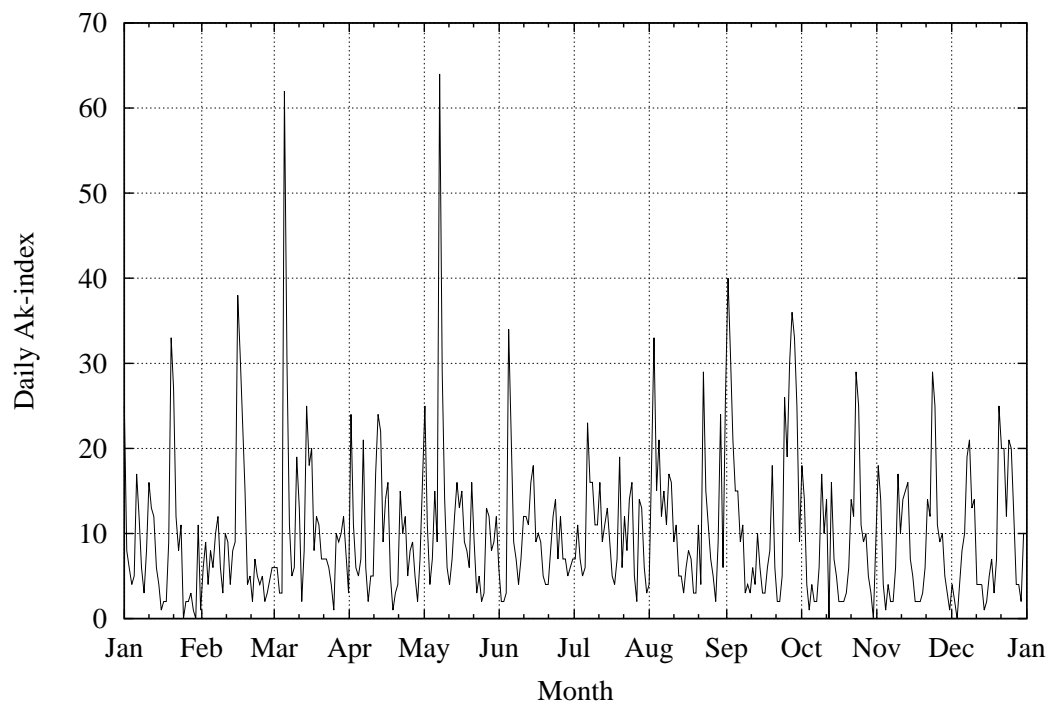


Figure 9: Daily Ak-indices

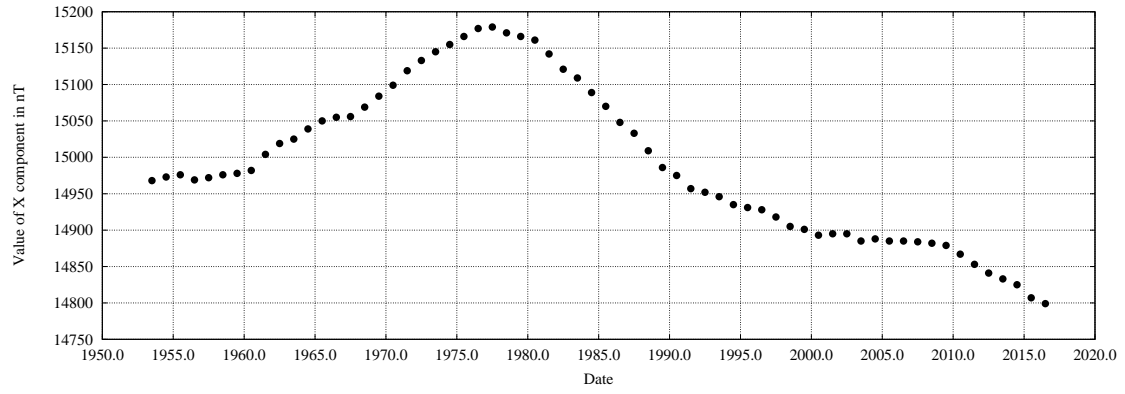
13.4 Table of Annual Ak-indices

m/M denotes sunspot minimum/maximum

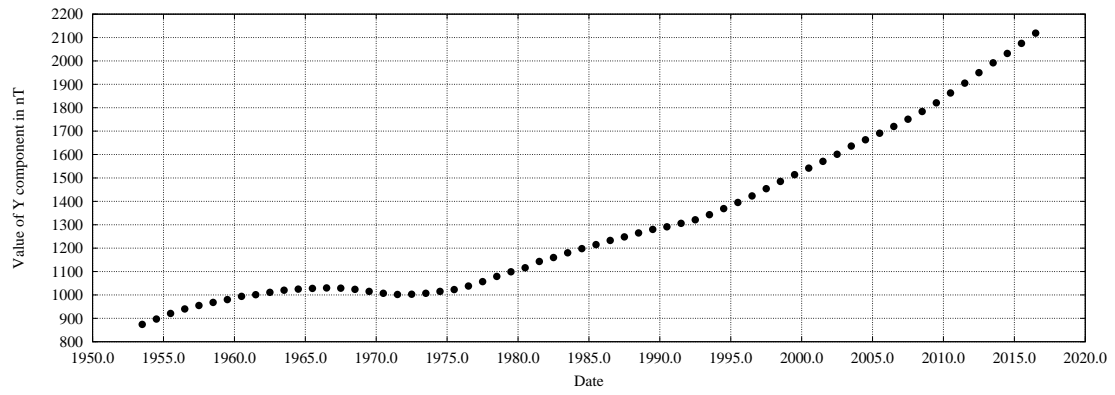
Year	Ak
1953	11
1954m	8
1955	9
1956	14
1957M	16
1958	18
1959	21
1960	22
1961	12
1962	10
1963	10
1964m	8
1965	6
1966	8
1967	10
1968M	11
1969	10
1970	10
1971	9
1972	10
1973	13
1974	15
1975	11
1976m	10
1977	9
1978	13
1979M	12
1980	9
1981	13
1982	19
1983	15
1984	14

Year	Ak
1985	10
1986m	10
1987	8
1988	11
1989M	16
1990	13
1991	21
1992	15
1993	13
1994	16
1995	11
1996m	9
1997	8
1998	12
1999	12
2000M	15
2001	14
2002	13
2003	22
2004	14
2005	14
2006	8
2007	7
2008m	7
2009	4
2010	6
2011	8
2012	9
2013	8
2014M	8
2015	13
2016	10

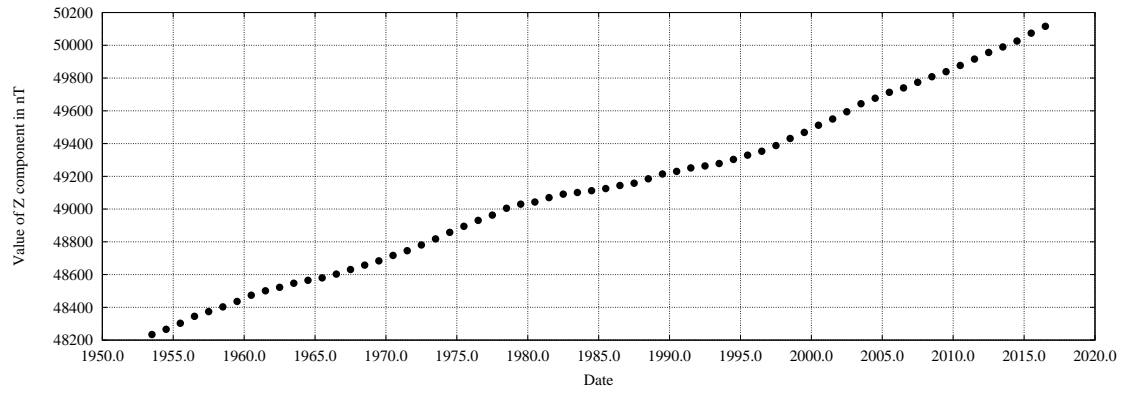
14 Annual Means



(a) Annual means for X component

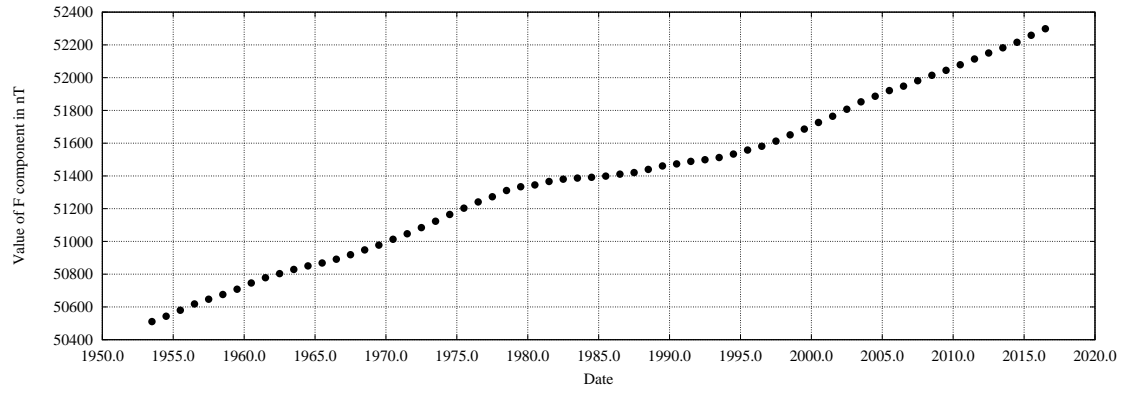


(b) Annual means for Y component

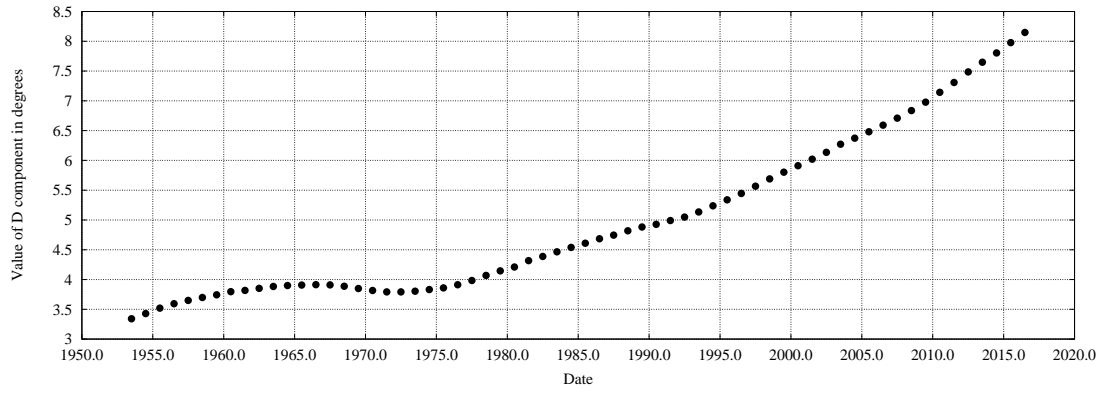


(c) Annual means for Z component

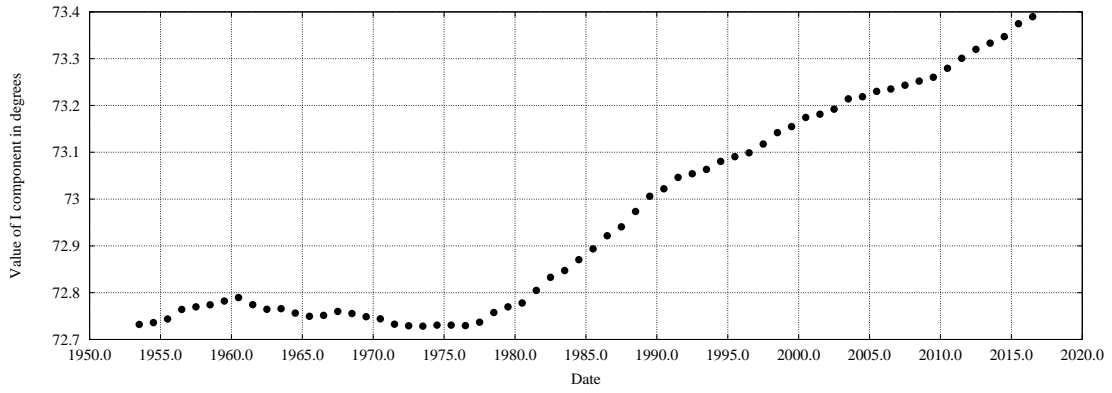
Figure 10: Figures of annual means of X, Y, and Z



(a) Annual means for F component



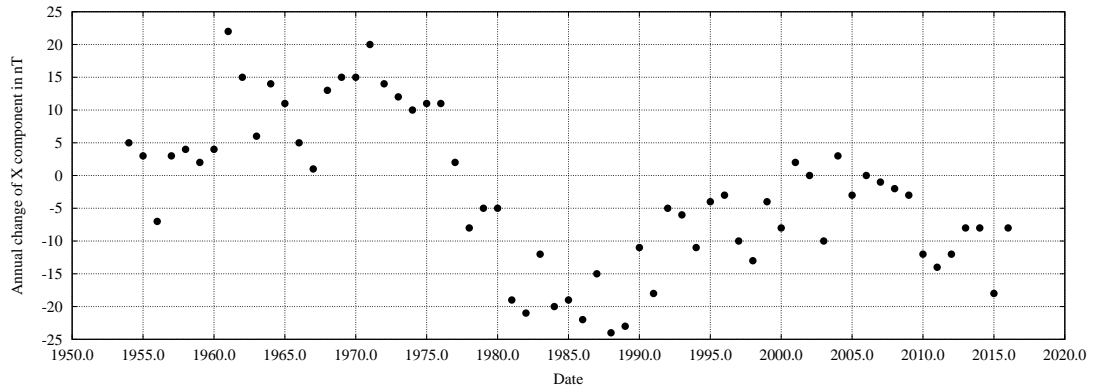
(b) Annual means for D component



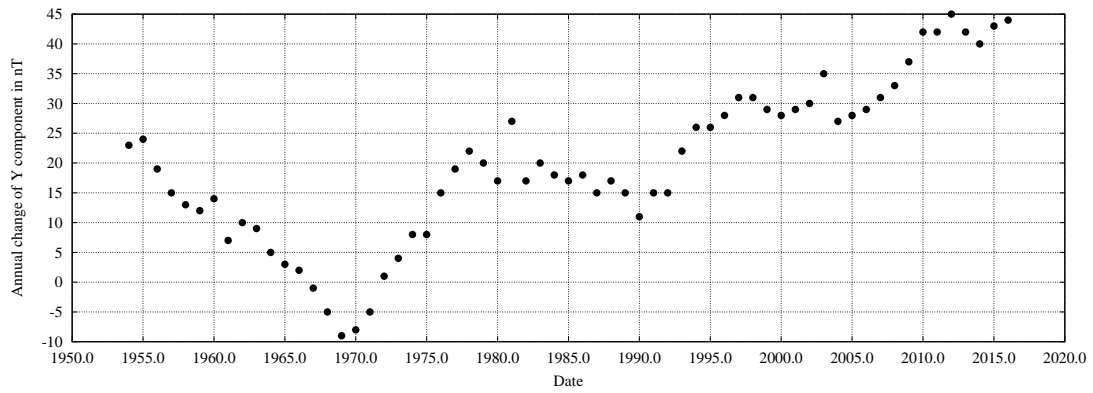
(c) Annual means for I component

Figure 11: Figures of annual means of F, D, and I

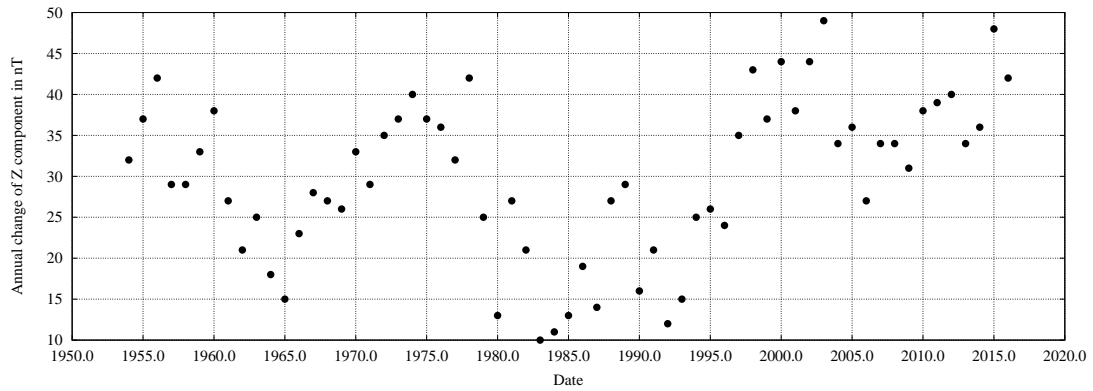
15 Secular Variation



(a) Annual change of X component

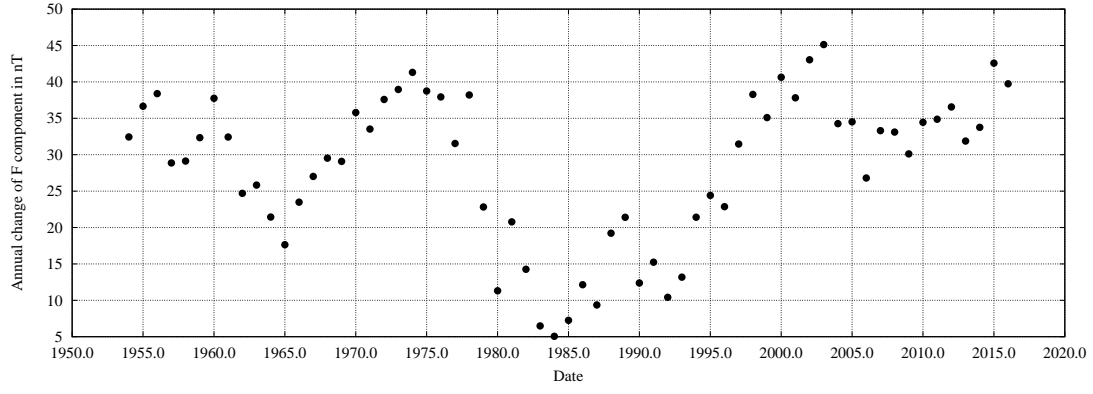


(b) Annual change of Y component

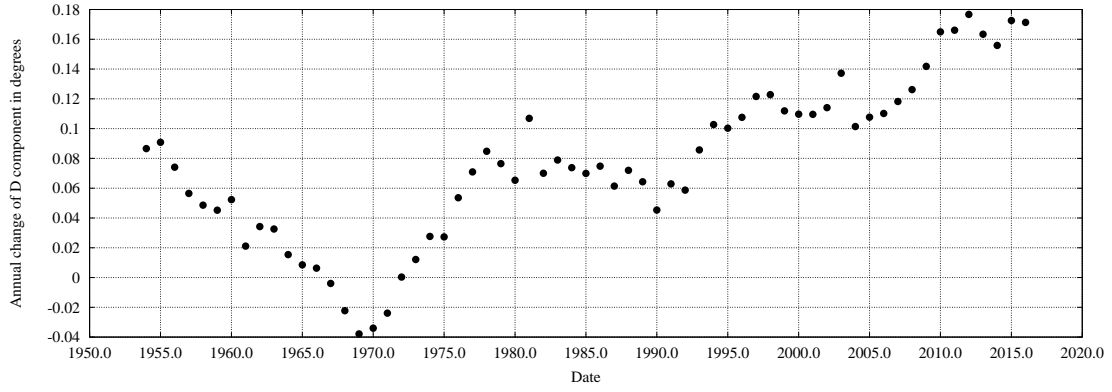


(c) Annual change of Z component

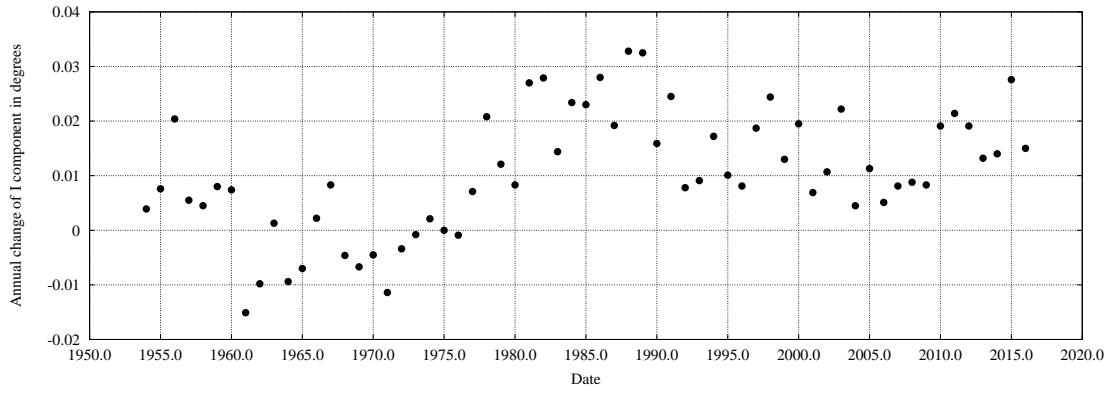
Figure 12: Annual change of components X, Y, and Z



(a) Annual change of F component



(b) Annual change of D component



(c) Annual change of I component

Figure 13: Annual change of components F, D, and I

16 Tables of Annual Means

16.1 All Days

Year	X	Y	Z	D	H	F	I
1953	14968	874	48234	3° 20.5'	14993	50511	72° 43.9'
1954	14973	897	48266	3° 25.7'	15000	50543	72° 44.2'
1955	14976	921	48303	3° 31.1'	15004	50580	72° 44.6'
1956	14969	940	48345	3° 35.6'	14998	50618	72° 45.8'
1957	14972	955	48374	3° 39.0'	15002	50647	72° 46.2'
1958	14976	968	48403	3° 41.9'	15007	50676	72° 46.4'
1959	14978	980	48436	3° 44.6'	15010	50708	72° 46.9'
1960	14982	994	48474	3° 47.7'	15015	50746	72° 47.4'
1961	15004	1001	48501	3° 49.0'	15037	50779	72° 46.5'
1962	15019	1011	48522	3° 51.1'	15053	50803	72° 45.9'
1963	15025	1020	48547	3° 53.0'	15060	50829	72° 45.9'
1964	15039	1025	48565	3° 53.9'	15074	50851	72° 45.4'
1965	15050	1028	48580	3° 54.5'	15085	50868	72° 45.0'
1966	15055	1030	48603	3° 54.8'	15090	50892	72° 45.1'
1967	15056	1029	48631	3° 54.6'	15091	50919	72° 45.6'
1968	15069	1024	48658	3° 53.3'	15104	50948	72° 45.3'
1969	15084	1015	48684	3° 51.0'	15118	50977	72° 44.9'
1970	15099	1007	48717	3° 48.9'	15133	51013	72° 44.6'
1971	15119	1002	48746	3° 47.5'	15152	51047	72° 44.0'
1972	15133	1003	48781	3° 47.5'	15166	51084	72° 43.8'
1973	15145	1007	48818	3° 48.2'	15178	51123	72° 43.7'
1974	15155	1015	48858	3° 49.9'	15189	51165	72° 43.8'
1975	15166	1023	48895	3° 51.5'	15200	51203	72° 43.8'
1976	15177	1038	48931	3° 54.8'	15212	51241	72° 43.8'
1977	15179	1057	48963	3° 59.0'	15216	51273	72° 44.2'
1978	15171	1079	49005	4° 04.1'	15209	51311	72° 45.5'
1979	15166	1099	49030	4° 08.7'	15206	51334	72° 46.2'
1980	15161	1116	49043	4° 12.6'	15202	51345	72° 46.7'
1981	15142	1143	49070	4° 19.0'	15185	51366	72° 48.3'
1982	15121	1160	49091	4° 23.2'	15165	51380	72° 50.0'
1983	15109	1180	49101	4° 27.9'	15155	51387	72° 50.8'
1984	15089	1198	49112	4° 32.4'	15136	51392	72° 52.2'
1985	15070	1215	49125	4° 36.6'	15119	51399	72° 53.6'
1986	15048	1233	49144	4° 41.1'	15098	51411	72° 55.3'
1987	15033	1248	49158	4° 44.7'	15085	51420	72° 56.4'
1988	15009	1265	49185	4° 49.1'	15062	51440	72° 58.4'
1989	14986	1280	49214	4° 52.9'	15041	51461	73° 00.4'
1990	14975	1291	49230	4° 55.6'	15031	51473	73° 01.3'
1991	14957	1306	49251	4° 59.4'	15014	51489	73° 02.8'
1992	14952	1321	49263	5° 02.9'	15010	51499	73° 03.3'
1993	14946	1343	49278	5° 08.1'	15006	51512	73° 03.8'
1994	14935	1369	49303	5° 14.2'	14998	51534	73° 04.8'
1995	14931	1395	49329	5° 20.3'	14996	51558	73° 05.4'
1996	14928	1423	49353	5° 26.7'	14996	51581	73° 05.9'
1997	14918	1454	49388	5° 34.0'	14989	51612	73° 07.1'
1998	14905	1485	49431	5° 41.4'	14979	51651	73° 08.5'
1999	14901	1514	49468	5° 48.1'	14978	51686	73° 09.3'
2000	14893	1542	49512	5° 54.7'	14973	51726	73° 10.5'
2001	14895	1571	49550	6° 01.2'	14978	51764	73° 10.9'
2002	14895	1601	49594	6° 08.1'	14981	51807	73° 11.5'
2003	14885	1636	49643	6° 16.3'	14975	51852	73° 12.9'
2004	14888	1663	49677	6° 22.4'	14981	51887	73° 13.1'
2005	14885	1691	49713	6° 28.9'	14981	51921	73° 13.8'
2006	14885	1720	49740	6° 35.5'	14984	51948	73° 14.1'
2007	14884	1751	49774	6° 42.6'	14987	51981	73° 14.6'
2008	14882	1784	49808	6° 50.1'	14989	52014	73° 15.1'
2009	14879	1821	49839	6° 58.7'	14990	52044	73° 15.6'
2010	14867	1863	49877	7° 08.6'	14983	52079	73° 16.8'
2011	14853	1905	49916	7° 18.5'	14975	52114	73° 18.1'
2012	14841	1950	49956	7° 29.1'	14969	52150	73° 19.2'
2013	14833	1992	49990	7° 38.9'	14966	52182	73° 20.0'
2014	14825	2032	50026	7° 48.3'	14964	52216	73° 20.8'
2015	14807	2075	50074	7° 58.6'	14952	52259	73° 22.5'
2016	14799	2119	50116	8° 08.9'	14950	52298	73° 23.4'

16.2 Quiet Days

Year	X	Y	Z	D	H	F	I
1953	14975	872	48235	3° 20.0'	15000	50514	72° 43.5'
1954	14977	895	48266	3° 25.2'	15004	50544	72° 43.9'
1955	14980	919	48302	3° 30.6'	15008	50580	72° 44.4'
1956	14978	936	48343	3° 34.6'	15007	50619	72° 45.2'
1957	14978	951	48372	3° 38.0'	15008	50647	72° 45.8'
1958	14984	965	48400	3° 41.1'	15015	50676	72° 45.9'
1959	14986	976	48433	3° 43.6'	15018	50708	72° 46.4'
1960	14993	989	48474	3° 46.4'	15026	50749	72° 46.7'
1961	15010	998	48501	3° 48.2'	15043	50780	72° 46.1'
1962	15022	1009	48523	3° 50.6'	15056	50805	72° 45.7'
1963	15032	1018	48547	3° 52.5'	15066	50831	72° 45.5'
1964	15042	1024	48566	3° 53.7'	15077	50852	72° 45.2'
1965	15051	1027	48581	3° 54.2'	15086	50869	72° 44.9'
1966	15059	1028	48602	3° 54.3'	15094	50892	72° 44.8'
1967	15062	1028	48630	3° 54.3'	15097	50920	72° 45.2'
1968	15073	1022	48657	3° 52.7'	15108	50948	72° 45.1'
1969	15089	1013	48684	3° 50.4'	15123	50979	72° 44.6'
1970	15104	1005	48715	3° 48.4'	15137	51013	72° 44.3'
1971	15124	1001	48746	3° 47.2'	15157	51048	72° 43.6'
1972	15139	1001	48780	3° 47.0'	15172	51085	72° 43.4'
1973	15151	1004	48819	3° 47.5'	15184	51126	72° 43.4'
1974	15162	1012	48859	3° 49.1'	15196	51167	72° 43.4'
1975	15171	1020	48896	3° 50.8'	15205	51206	72° 43.5'
1976	15182	1035	48930	3° 54.0'	15217	51242	72° 43.5'
1977	15184	1054	48963	3° 58.2'	15221	51274	72° 43.9'
1978	15178	1075	49003	4° 03.1'	15216	51311	72° 45.0'
1979	15171	1096	49028	4° 07.9'	15211	51333	72° 45.8'
1980	15163	1115	49042	4° 12.3'	15204	51345	72° 46.5'
1981	15148	1140	49067	4° 18.2'	15191	51365	72° 47.9'
1982	15128	1157	49090	4° 22.4'	15172	51381	72° 49.5'
1983	15115	1176	49101	4° 26.9'	15161	51388	72° 50.5'
1984	15095	1195	49113	4° 31.6'	15142	51394	72° 51.9'
1985	15076	1212	49125	4° 35.8'	15125	51401	72° 53.2'
1986	15055	1230	49144	4° 40.2'	15105	51413	72° 54.9'
1987	15037	1246	49158	4° 44.2'	15089	51422	72° 56.2'
1988	15014	1262	49182	4° 48.3'	15067	51438	72° 58.1'
1989	14995	1276	49213	4° 51.8'	15049	51463	72° 59.8'
1990	14982	1288	49227	4° 54.8'	15037	51472	73° 00.8'
1991	14965	1302	49248	4° 58.3'	15022	51488	73° 02.2'
1992	14959	1318	49261	5° 02.1'	15017	51499	73° 02.8'
1993	14952	1341	49277	5° 07.5'	15012	51513	73° 03.4'
1994	14944	1365	49304	5° 13.1'	15006	51537	73° 04.3'
1995	14937	1392	49328	5° 19.4'	15002	51559	73° 05.1'
1996	14934	1421	49353	5° 26.1'	15001	51583	73° 05.6'
1997	14923	1452	49388	5° 33.4'	14993	51614	73° 06.7'
1998	14910	1484	49431	5° 41.0'	14984	51652	73° 08.2'
1999	14905	1512	49467	5° 47.5'	14981	51686	73° 09.0'
2000	14900	1540	49510	5° 54.1'	14979	51726	73° 10.0'
2001	14901	1569	49548	6° 00.6'	14983	51764	73° 10.5'
2002	14901	1599	49593	6° 07.5'	14987	51808	73° 11.1'
2003	14896	1632	49644	6° 15.1'	14985	51856	73° 12.2'
2004	14894	1660	49677	6° 21.6'	14986	51888	73° 12.8'
2005	14891	1689	49714	6° 28.3'	14986	51924	73° 13.5'
2006	14889	1718	49740	6° 34.9'	14988	51949	73° 13.9'
2007	14887	1749	49774	6° 42.0'	14989	51982	73° 14.4'
2008	14885	1783	49808	6° 49.8'	14991	52015	73° 14.9'
2009	14880	1821	49839	6° 58.6'	14991	52045	73° 15.6'
2010	14869	1862	49877	7° 08.3'	14985	52079	73° 16.7'
2011	14856	1904	49916	7° 18.2'	14978	52115	73° 17.9'
2012	14844	1949	49956	7° 28.8'	14971	52151	73° 19.0'
2013	14837	1991	49990	7° 38.6'	14970	52183	73° 19.7'
2014	14828	2030	50025	7° 47.7'	14966	52216	73° 20.6'
2015	14814	2073	50073	7° 58.0'	14958	52260	73° 22.1'
2016	14803	2117	50117	8° 08.3'	14954	52300	73° 23.2'

16.3 Disturbed Days

Year	X	Y	Z	D	H	F	I
1953	14959	879	48230	3° 21.8'	14985	50504	72° 44.4'
1954	14968	899	48264	3° 26.2'	14995	50540	72° 44.4'
1955	14967	924	48301	3° 32.0'	14995	50575	72° 45.2'
1956	14952	945	48344	3° 37.0'	14982	50612	72° 46.9'
1957	14959	961	48376	3° 40.5'	14990	50645	72° 47.0'
1958	14958	974	48407	3° 43.5'	14990	50675	72° 47.7'
1959	14963	986	48439	3° 46.2'	14995	50707	72° 47.9'
1960	14960	1004	48468	3° 50.4'	14994	50734	72° 48.6'
1961	14992	1005	48498	3° 50.1'	15026	50772	72° 47.2'
1962	15013	1013	48522	3° 51.6'	15047	50802	72° 46.3'
1963	15014	1025	48543	3° 54.3'	15049	50822	72° 46.6'
1964	15035	1027	48564	3° 54.5'	15070	50848	72° 45.6'
1965	15044	1030	48580	3° 55.0'	15079	50866	72° 45.3'
1966	15046	1033	48602	3° 55.7'	15081	50888	72° 45.6'
1967	15042	1034	48630	3° 55.9'	15077	50914	72° 46.5'
1968	15061	1028	48659	3° 54.3'	15096	50947	72° 45.8'
1969	15074	1019	48684	3° 52.0'	15108	50974	72° 45.5'
1970	15089	1011	48721	3° 50.0'	15123	51014	72° 45.4'
1971	15111	1006	48746	3° 48.5'	15144	51044	72° 44.5'
1972	15122	1007	48780	3° 48.6'	15155	51080	72° 44.4'
1973	15133	1013	48816	3° 49.8'	15167	51118	72° 44.4'
1974	15147	1019	48857	3° 50.9'	15181	51161	72° 44.3'
1975	15157	1027	48892	3° 52.6'	15192	51198	72° 44.3'
1976	15166	1042	48931	3° 55.8'	15202	51238	72° 44.5'
1977	15169	1061	48962	4° 00.1'	15206	51269	72° 44.8'
1978	15158	1086	49006	4° 05.9'	15197	51308	72° 46.3'
1979	15158	1103	49031	4° 09.7'	15198	51332	72° 46.7'
1980	15153	1120	49046	4° 13.6'	15194	51346	72° 47.2'
1981	15133	1146	49073	4° 19.8'	15176	51366	72° 48.9'
1982	15106	1166	49089	4° 24.8'	15151	51374	72° 50.9'
1983	15099	1184	49099	4° 29.0'	15145	51382	72° 51.4'
1984	15078	1203	49108	4° 33.7'	15126	51385	72° 52.8'
1985	15061	1219	49124	4° 37.6'	15110	51395	72° 54.1'
1986	15037	1237	49141	4° 42.2'	15088	51405	72° 55.9'
1987	15027	1250	49161	4° 45.3'	15079	51422	72° 56.9'
1988	15001	1268	49186	4° 49.9'	15054	51438	72° 58.9'
1989	14968	1287	49212	4° 54.9'	15023	51454	73° 01.4'
1990	14964	1296	49232	4° 57.0'	15020	51472	73° 02.0'
1991	14942	1313	49257	5° 01.3'	15000	51490	73° 03.8'
1992	14943	1324	49264	5° 03.8'	15002	51497	73° 03.8'
1993	14937	1348	49277	5° 09.4'	14998	51509	73° 04.3'
1994	14924	1373	49300	5° 15.4'	14987	51528	73° 05.5'
1995	14924	1398	49328	5° 21.1'	14989	51555	73° 05.9'
1996	14923	1425	49350	5° 27.3'	14991	51577	73° 06.2'
1997	14909	1457	49388	5° 34.9'	14980	51610	73° 07.6'
1998	14893	1489	49431	5° 42.6'	14967	51647	73° 09.3'
1999	14891	1517	49468	5° 49.0'	14968	51683	73° 09.9'
2000	14878	1547	49514	5° 56.2'	14958	51724	73° 11.4'
2001	14880	1576	49554	6° 02.8'	14963	51764	73° 11.9'
2002	14886	1604	49594	6° 09.0'	14972	51805	73° 12.1'
2003	14866	1643	49641	6° 18.4'	14957	51845	73° 14.0'
2004	14875	1669	49675	6° 24.1'	14968	51881	73° 13.9'
2005	14879	1696	49711	6° 30.2'	14975	51918	73° 14.1'
2006	14878	1722	49738	6° 36.1'	14977	51944	73° 14.5'
2007	14880	1754	49773	6° 43.4'	14983	51979	73° 14.8'
2008	14879	1787	49807	6° 50.9'	14986	52013	73° 15.3'
2009	14877	1822	49838	6° 58.9'	14988	52043	73° 15.7'
2010	14861	1865	49877	7° 09.2'	14978	52077	73° 17.1'
2011	14846	1908	49914	7° 19.4'	14968	52110	73° 18.4'
2012	14832	1953	49956	7° 30.1'	14960	52148	73° 19.7'
2013	14825	1994	49989	7° 39.6'	14958	52179	73° 20.5'
2014	14820	2034	50026	7° 48.9'	14959	52215	73° 21.1'
2015	14939	2079	50073	7° 55.4'	15083	52295	73° 14.2'
2016	14789	2122	50114	8° 09.9'	14940	52294	73° 23.9'

17 Earth's Magnetic Field Maps of Finland 2017.0

The isolines of total field (F) and horizontal field (H) are given in nanoteslas (nT), declination (D, positive eastwards) and inclination (I, positive downwards) in degrees of arc.

TOTAL INTENSITY (F) 2017.0

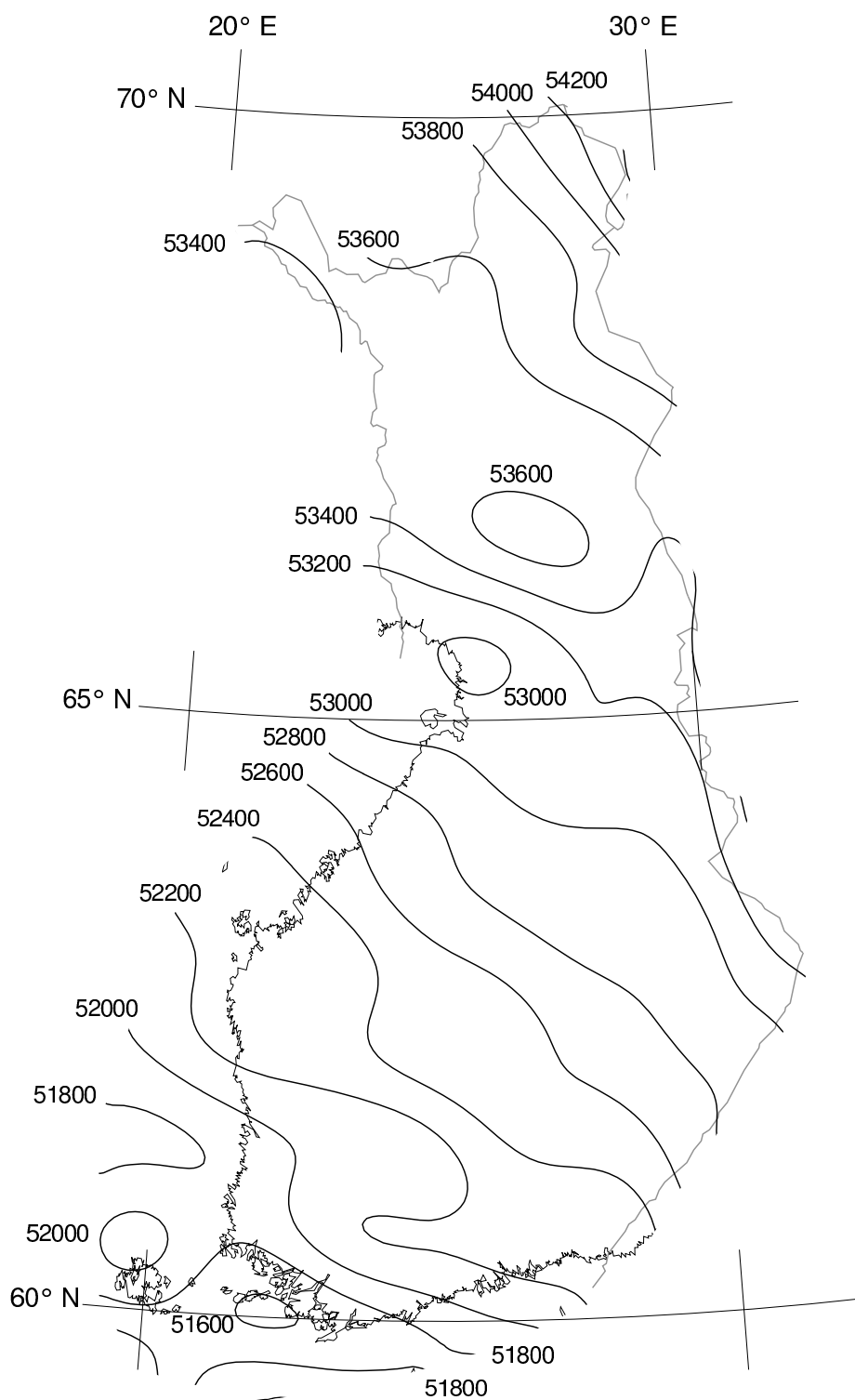


Figure 14: Total intensity F 2017.0 in nT

HORIZONTAL INTENSITY (H) 2017.0

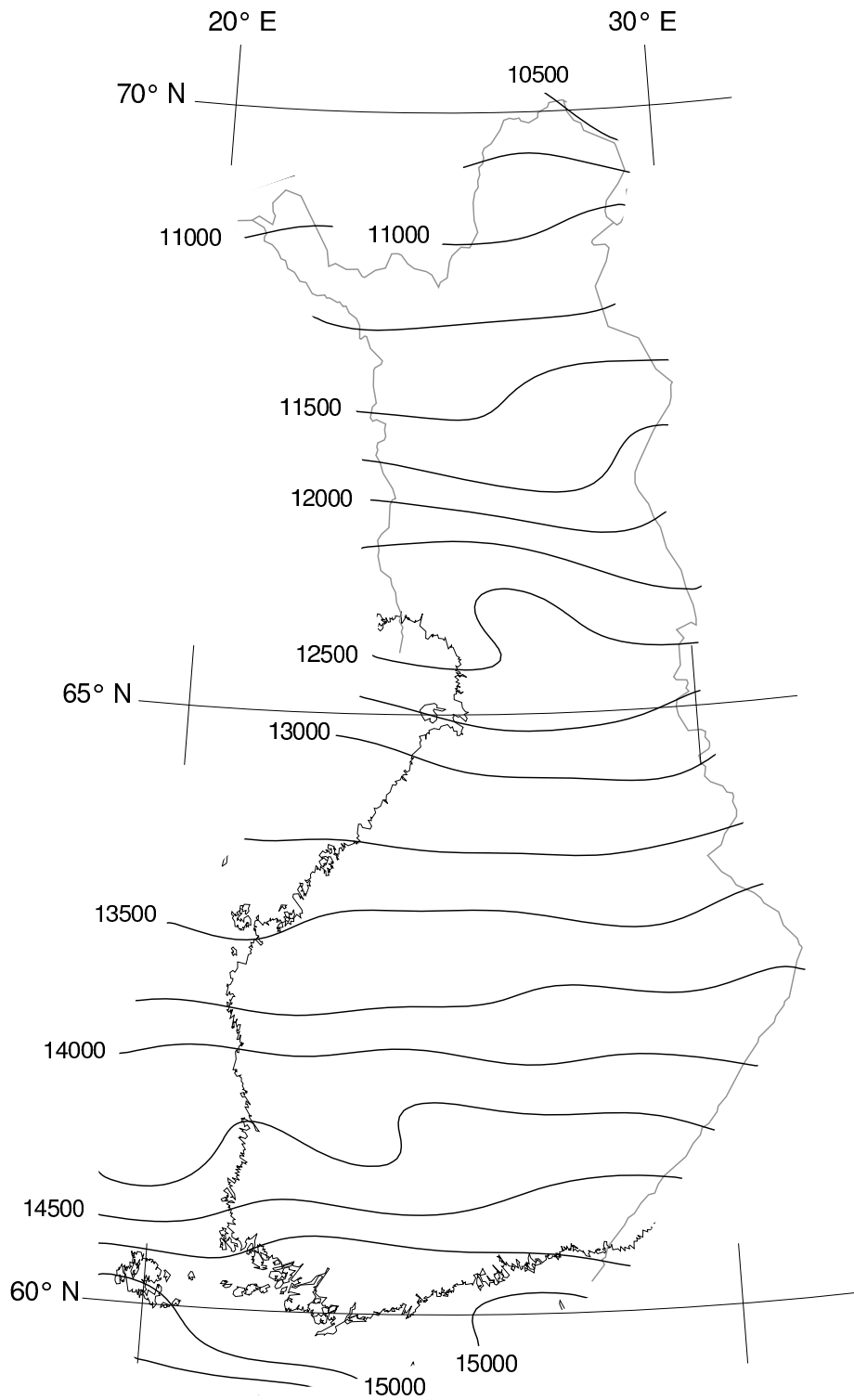


Figure 15: Horizontal intensity H 2017.0 in nT

DECLINATION (D) 2017.0

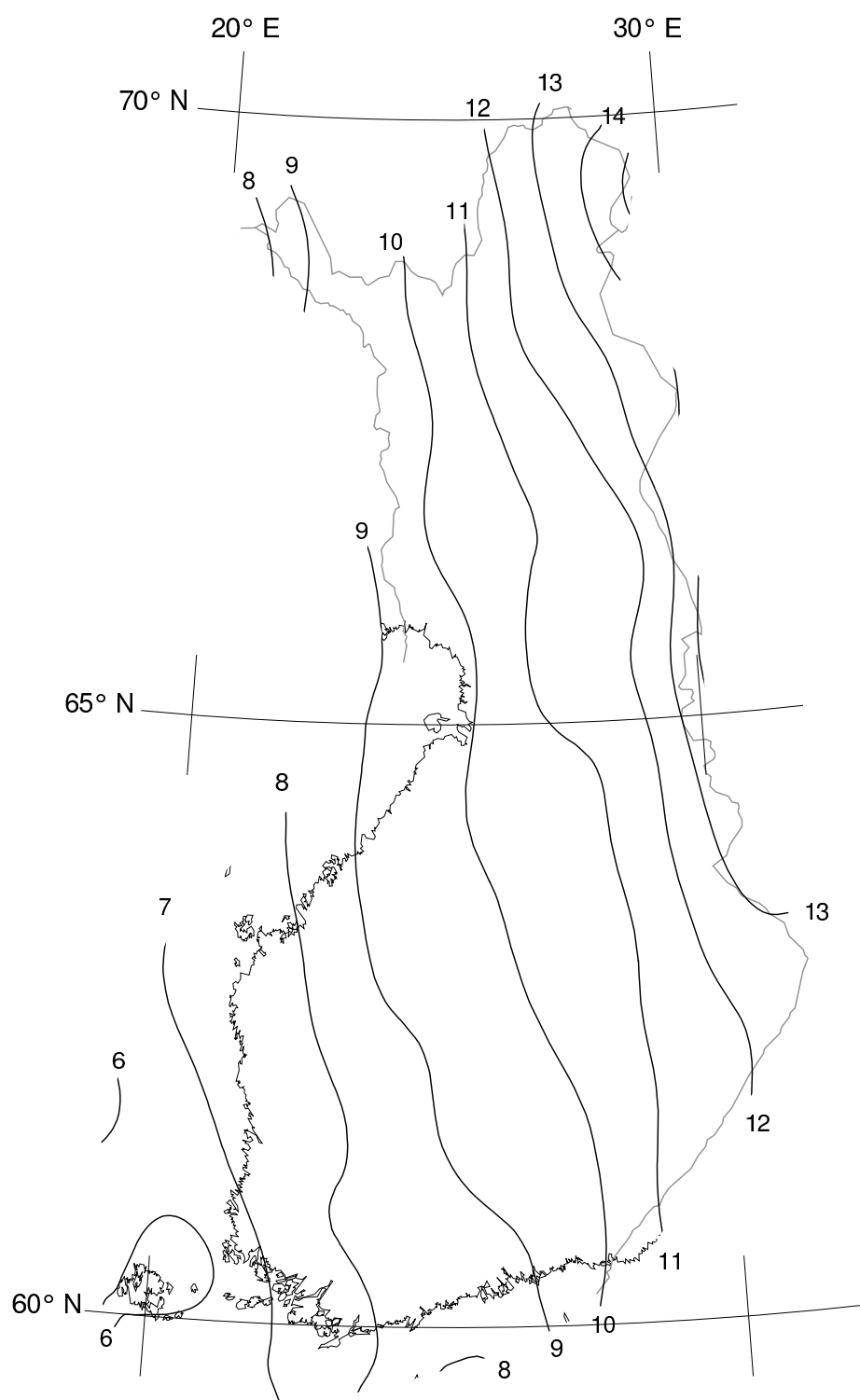


Figure 16: Declination D 2017.0 in degrees

INCLINATION (I) 2017.0

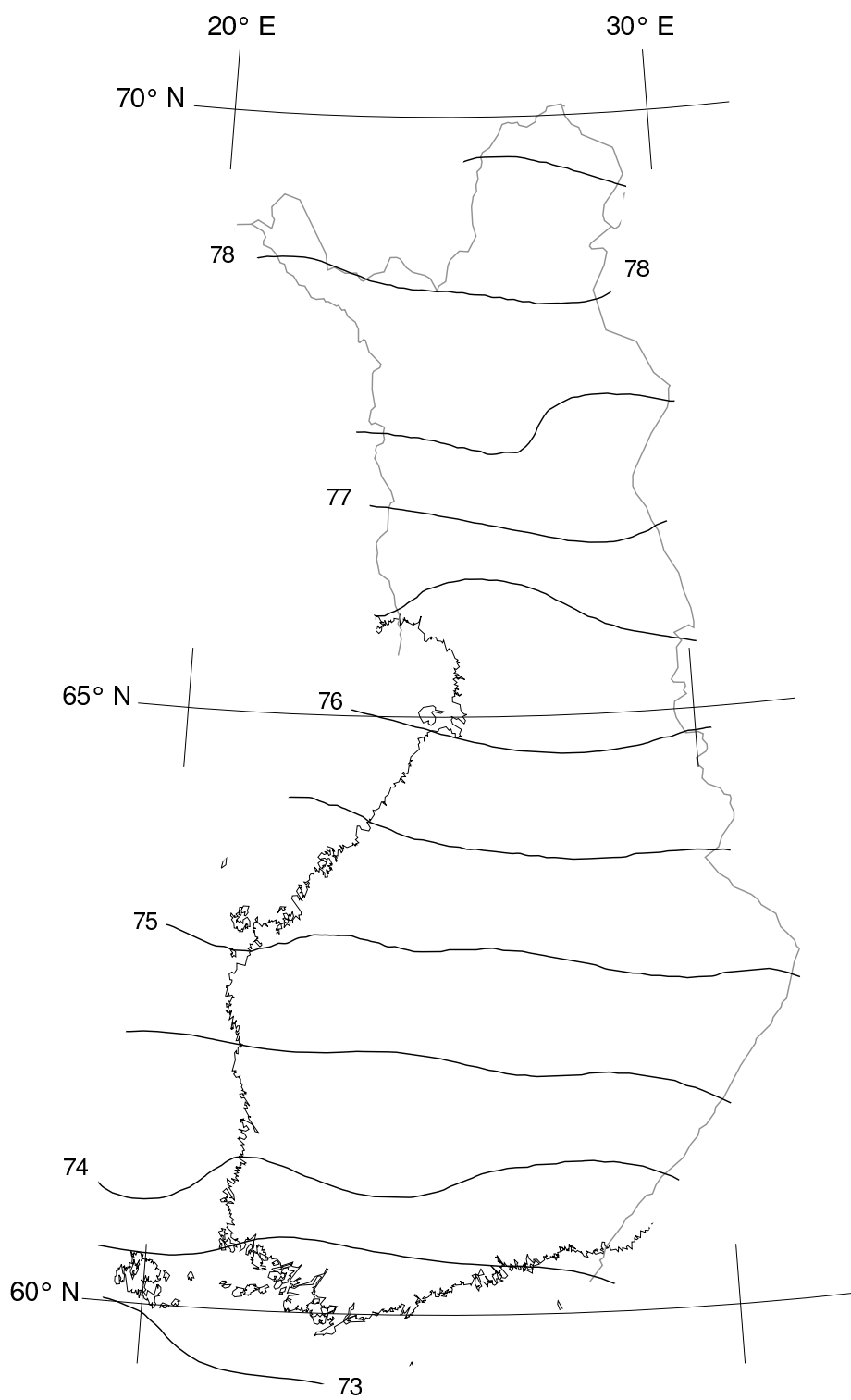


Figure 17: Inclination I 2017.0 in degrees

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